

HOUSING LONDONERS

nla

INNOVATION IN
DELIVERY AND
DESIGN

‘Housing Londoners’ explores what the built environment community is doing, and can do, to innovate and enact positive change on London’s housing sector, through the lenses of affordability, quality of life, sustainability and local benefit.

Informed through widespread industry engagement, here we present latest market trends, best practice projects, and solutions being trialled across the city, and present a series of recommendations to ensure new housing best responds to the needs of London’s citizens.’

This report was published by NLA in September 2023 and is part of the year-round NLA Housing Programme.

The ‘Housing Londoners’ essay has been written by Claire Bennie, with contributions from industry leaders and the NLA Expert Panel on Housing.

nla.london ↗ | [#NLAhousing](https://twitter.com/NLAhousing)

© NLA

Contents

- 4 Foreword →
- 8 Executive Summary →
- 12 Housing Londoners →
- 56 Viewpoints →
- 66 Project Showcase →
- 124 Definitions →
- 127 Endnotes →
- 129 Further Reading →
- 130 Acknowledgements →

Foreword

By Peter Murray OBE, Co-Founder, NLA

The NLA represents and reflects the views of London’s built environment community — a community of experts committed to delivering positive change in the capital, few of whom would disagree that the lack of affordable housing is the most problematic of the many issues currently facing London.

The city operates in a state of permanent crisis inflicted by an intransigent tangle of policies, planning and penury. Deputy Mayor for Housing, Tom Copley says we “have a deep housing crisis, decades in the making”. In 2015, when we published our report *New Ideas for Housing*, Richard Blakeway, then Deputy Mayor under Boris Johnson, began his introduction with the words, “Housing supply has become the most critical issue facing London”. NLA’s *New Ideas for housing* report studied physical interventions that could increase the delivery of housing — ideas around densification of suburbs and housing estates, rooftop additions, small sites and infilling. This report studies many of the less tangible issues which hamper housing delivery in the current climate and suggests positive interventions that can inform the local and national political debate.

In the post-Covid environment, what contribution can be made by redeveloping redundant office space for residential use while avoiding the poor quality conversions that occurred previously under PD rights? What can we do to speed up planning, particularly in small sites? These provide a role for smaller developers and contractors. They can make a contribution, yet one hears stories of single sites taking over two years to struggle through the overstretched and underqualified planning departments.

How do we engage with communities at a time when trust in development and in the planning system is at a low ebb? While the NLA’s London Centre provides a space where the general public can engage with decision-makers in the built environment in the past, we have worked with Southwark and Croydon on temporary centres, which proved beneficial, and we have mentored a new centre in Auckland, New Zealand, which is proving a great success. Surely every city and borough needs an urban room as proposed by the Farrell report back in 2013?

Not all the news is bad. Opportunity London, a collaboration between the City of London, London’s

Council and the Mayor is working on innovative new funding models. TfL's housing delivery company, Places for London, now that it is released from the shackles of its parent, has the capacity to deliver 20,000 homes on public land, the work of Be First at Barking and Dagenham, Meridian Water in Enfield, Populo at Newham are great examples of how local authorities can up their game. Community Land Trusts are gaining traction. The build-to-rent sector is perhaps the most positive area of growth, although still a small part of the market. The benefits of long-term patient capital, which can transform the economic model, whether in Mayfair or Barking, are increasingly recognised.

This report is a catalyst for the continuing debate on London's housing crisis. It informs decision-makers, highlights issues and posits solutions. It is supported by the NLA programme, Sounding Board and Expert Panels to encourage a wider debate to help improve the quality of life, resilience and appreciation of this great city.

We dedicate this report to the memory of Lord Kerslake, who sadly died in July this year. Bob was a doughty fighter for better housing and better lives in his roles as Chief Executive of the Homes and Communities Agency, Chair of Peabody and Be First.



Citizens House, by Archio for Community Land Trust, in the LB Lewisham. Completed in 2023 © French+Tye

Foreword

By Tom Copley, Deputy Mayor for Housing and Residential Development, Greater London Authority

London has a deep housing crisis, decades in the making but in the midst of this huge challenge there is an equally powerful desire for change, and signs in recent years of clear progress. This report presents an interesting analysis of some of the main issues policymakers and the sector will continue to grapple with in the coming years.

Tackling the housing costs crisis for Londoners has been a priority for Sadiq Khan, and for me as London's Deputy Mayor for Housing.

We've had a laser-like focus on building the genuinely affordable homes our capital needs and I'm proud that London is striding ahead of the rest of the country. We've achieved the hugely ambitious target of starting 116,000 genuinely affordable homes for Londoners between 2015–16 and 2022–23, with record-breaking delivery last year. This was at the same time as ditching the Government's so-called 'Affordable Rent' tenure, priced at up to 80 per cent of market rents.

More than anything else, this achievement shows what can be done where there is political will and strong

partnerships. Through close collaboration with local councils, housing associations, architects and developers, and in spite of the myriad challenges facing the sector, we can achieve extraordinary results.

One of the most exciting parts of this boost in the building of genuinely affordable homes is the renaissance in council homebuilding in the capital. Last year over 10,000 new council homes were started, the highest level since the 1970s.

It's an example of a turnaround that didn't happen by accident. It has been driven by hard work by boroughs and those right across the sector, and backed by signature mayoral initiatives such as the £1bn Building Council Homes for Londoners grant funding programme, and our Right to Buy-back programme, supporting boroughs to turbo-charge delivery after decades of decline.

The result has been more than just higher numbers. A new sense of pride in municipal homebuilding can be seen in the high standards and excellent designs of so much of London's new council housing, which I truly believe is

amongst the best that's ever been built in our city. It should be a blueprint for the rest of the country to follow.

Of course, the sheer scale of London's housing crisis means so much more needs to be done to build the genuinely affordable homes we need. Research by City Hall and Savills published in December 2022 found that London needs £4.9bn a year between 2023–24 and 2027–28 to deliver the 130,000 affordable homes needed. Alongside further affordable housing investment, other changes, from compulsory purchase reform to a commitment to back new transport infrastructure are also badly needed.

However, the steps taken in London recent years show that progress can be made in building a city that is fairer, greener and safer for all. I look forward to continuing to work with the wealth of talent, expertise and ambition we have in our city to do just that.



Vincent-Street, Canning Town by Jestico + Whiles, Deft.Space, ArchitectureDoingPlace and the LB Newham is the first phase of a community-led masterplan which will provide up to one thousand seven hundred and fifty new homes for Canning Town. Completion in 2025 © Jestico + Whiles

Executive Summary



AFFORDABILITY

WHAT WE KNOW:

- Rising rents are pushing PRS tenants to spend 42 per cent of their income on housing, substantially more than the 30 per cent maximum level needed to sustain a household. The average deposit required for a first time buyer in London is now £125,000
- Mid-market housing still only makes up 1.6 per cent of London's housing offer, and build-to-rent only a further 1 per cent
- Housing benefit of £8.4bn is being spent every year in London, compared with c. £0.8bn on grant funding for new affordable homes.

WHAT WE SHOULD DO:

- An easy-to-invest public grant and patient capital vehicle should be set up to encourage private funds which are already seeking investment opportunities in affordable and sustainable housing
- Public land will be key to delivery: active land assembly should be prioritised and rules around public land valuation and disposal must be clearer to enable public benefit



QUALITY OF LIFE

WHAT WE KNOW:

- 1.6 per cent of London households are homeless or in Temporary Accommodation
- 15 per cent of affordable homes and 20 per cent of PRS homes do not meet the basic Decent Homes Standard
- 90 per cent of new London homes are flats rather than houses, and one in seven of these flats is within a 20+ storey tower

WHAT WE SHOULD DO:

- Shared spaces and amenities for resident communities are on the rise, with Build to Rent leading the charge; these spaces need to be embedded in planning guidance
- 26,000 new homes with care are needed in London for an increasing older population — planning policy should reflect this need and intergenerational homes should be considered in the mix



SUSTAINABILITY

WHAT WE KNOW:

- Retrofitting London's stock will cost a minimum of £60bn, with the aim of halving the heat demand
- A retrofit installation will need to be completed every minute for London's stock to be retrofitted by 2050, requiring a workforce in the tens of thousands
- 31 million square feet of office space was empty in London in August 2022, but converting much of it to homes may be challenging

WHAT WE SHOULD DO:

- Embodied carbon in new build remains a major challenge, and the UK needs quickly to resolve the regulation and warranty challenges surrounding timber in housing
- Regulation and reporting on whole life carbon should become the industry norm and part of the design process



LOCAL BENEFIT

WHAT WE KNOW:

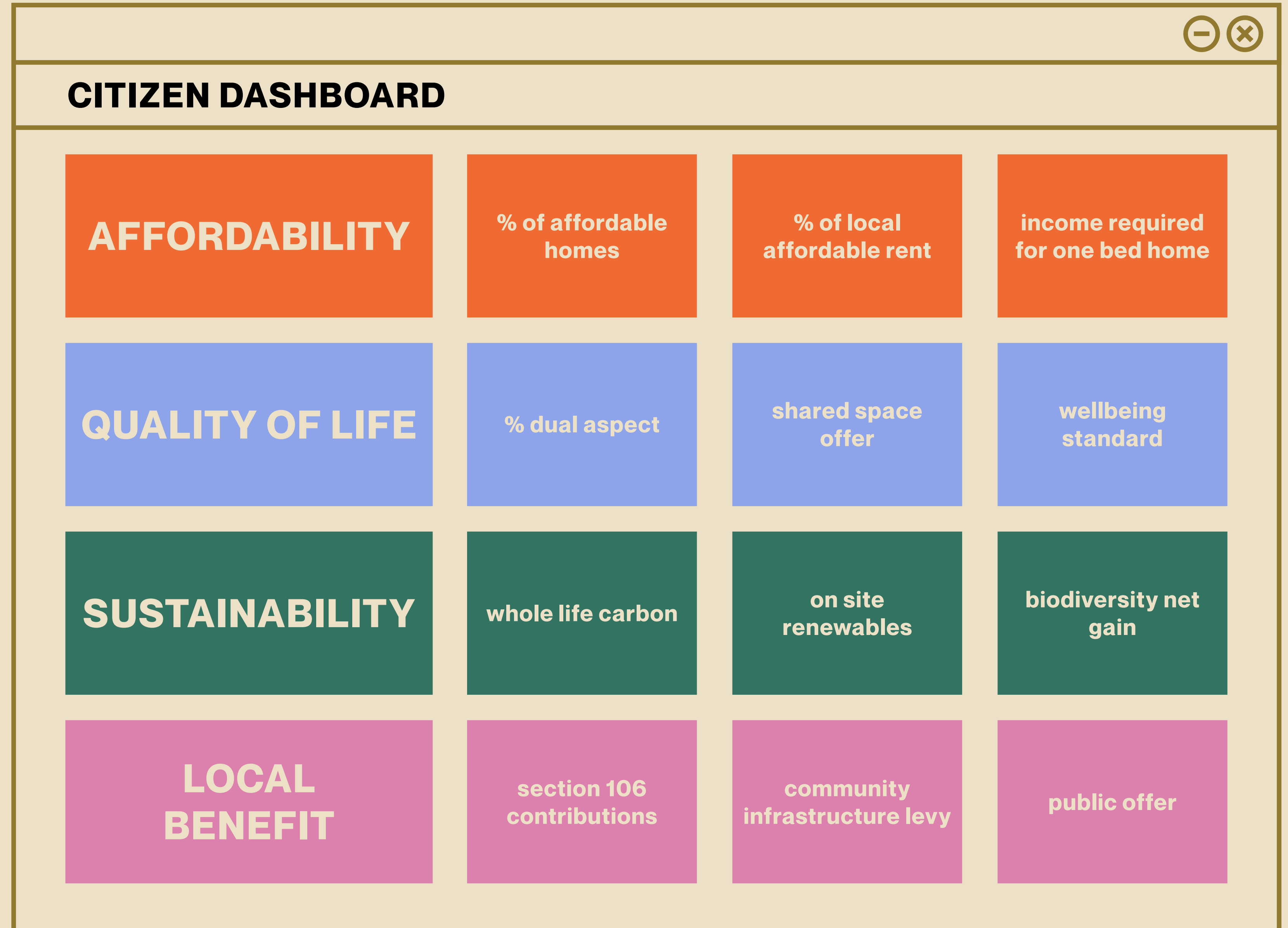
- Community engagement is far more embedded into the development process than it was, but Londoners are still often not convinced by the necessity of intensification and height
- S106 and CIL payments of c. £0.8bn a year are invested into neighbourhood improvements, but are not transparent or widely understood by citizens
- 'Social value' has become a major feature of public sector development schemes, increasing the delivery of jobs, apprenticeships and other local upskilling

WHAT WE SHOULD DO:

- A citizen assembly should be established to debate and trade off the various citizen needs, and guide London policy on housing
- A citizen dashboard describing local benefits should be established for every scheme and displayed on hoardings

A simple **Citizen Dashboard** would empower Londoners to see what any given development is delivering from a citizen perspective, under the lens of the four essay themes of affordability, quality of life, sustainability and local benefit.

The example on the next page presents what this tool may look like, using the four themes presented in this study, and using a point-based system for a fictional scheme.



CITIZEN DASHBOARD – AN EXAMPLE

Scheme:

Example project

Location:

London

Status:

Example



AFFORDABILITY	% of affordable homes 50%	% of local affordable rent 35%	income required for one bed home £35k	Citizen score 7/10
QUALITY OF LIFE	% dual aspect 70%	shared space offer co-working	wellbeing standard Achieves Fitwel standard	6/10
SUSTAINABILITY	whole life carbon 1,800 kgCO2e/sqm	on site renewables Yes – solar	biodiversity net gain 10%	8/10
LOCAL BENEFIT	section 106 contributions £1,500 per home	community infrastructure levy £300 per home	public offer public realm improvements and new community centre	7/10
OVERALL SCORE				28/40

Housing Londoners

Introduction

Since the NLA's 2015 *New Ideas for Housing* report, London has seen tragic loss of life at Grenfell Tower, a pandemic, a fuel crisis, and the seemingly intractable issue of housing affordability becoming worse. And yet towers are springing up, and people are still arriving in their tens of thousands to live in this indefatigable city. All of this serves to highlight more starkly than ever that London may be a resilient city, but it is also an increasingly inequitable one. In another unequal and unhealthy era, George Peabody vowed to build homes in 19th century London which 'embodied in the utmost degree the qualities of economy, comfort, healthfulness, and social enjoyment'.¹

London's households are constantly trading off between these factors to this day, which we might now characterise as 'affordability' and 'quality of life'. Londoners are weighing up daily whether they can afford their home (both now and in the long term), against whether their home is conveniently located, comfortable and healthy, offering social amenity, control over management and the freedom to stay. Whilst there's always an element of compromise to people's home choices, it is a safe bet that those living in London's different tenures will be faced with starkly different choices. This situation is not only unfair, but it also

¹ Mr Peabody did not have to wrestle with the added existential threat of climate change. Nor did he have to worry about how he delivered his schemes: planning, local sentiment and social value were not on the 19th century agenda. The complexity of today's housing delivery environment is frankly overwhelming.



Taylor & Chatto Courts and Wilmott Court, Frampton Park Estate by Henley Halebrown, LB Hackney in Hackney is a scheme which focuses on repair rather than regeneration, and stitches two new buildings into the estate, accommodating 45 homes. Completed in 2021 © Jim Stephenson

impacts on London's ability to retain workers and sustain its economic activity. Let's now layer on the existential threat of climate change. In that regard alone, it seems apt for the built environment industry to focus as hard on London's legacy stock as on the delivery of new homes.²

So what are we prepared to do as a society to work towards a fairer and more sustainable city? In one breath, we want more affordable housing, but in the next, we don't want to pay for that. We don't want that housing in the green belt, nor do we want to see towers in our neighbourhoods. We don't want to demolish estates, and we certainly won't demolish the suburbs. And we're worried about clothing our homes in insulation, from both a safety and an aesthetic perspective. London's citizens may need to form an assembly to overcome these divisions together, set a vision for London's housing, and then challenge the authorities and the built environment sector with implementing it.

This study therefore acts as an opening scene-setter for that assembly. It applies a 'citizen eye' to London's housing challenges, using the lenses of affordability, quality of life, sustainability and local benefit. It also proposes a 'citizen dashboard' based on these themes, so that Londoners can see what they are getting at building, neighbourhood and city-wide levels. Set out in this essay are many excellent initiatives involving people and organisations with intense energy and the will to battle against blind bureaucratic

obstruction. But without massive public policy change, those initiatives will remain on the fringe. In the end, it will be clear policy direction, radical funding and the enlightened use of public land which will level up this city.

² Of course, new supply is where the built environment sector traditionally has the most control and agency, but after 25 years, only 20% more homes will have been added to London. It's time to grapple with and cherish the 3.7 million homes we already have.

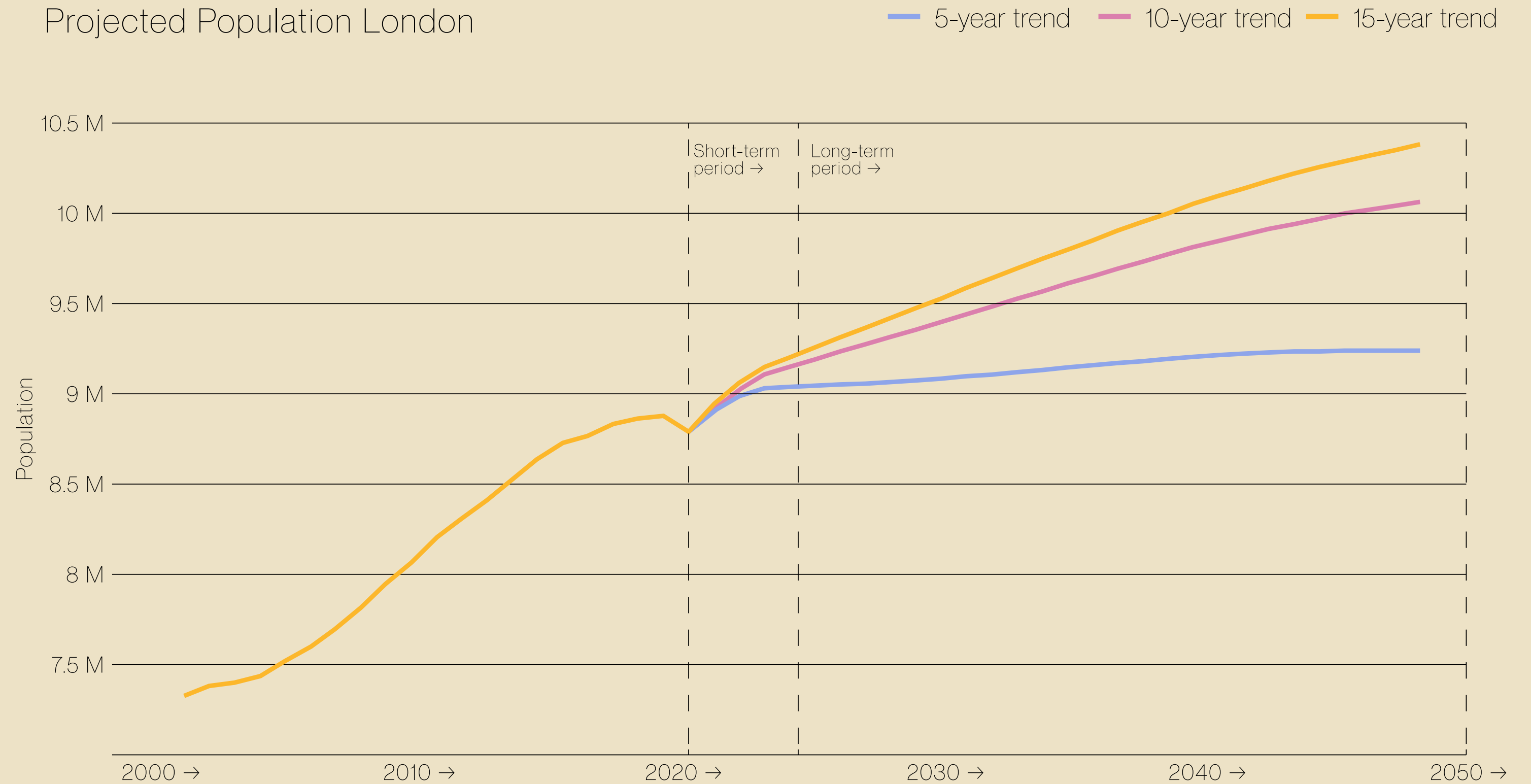
The Basics

Population

London's current population is just shy of 9 million people, and projected to be growing at up to 55,000 people a year for the next ten years^a — a much slower rate than in the previous ten years. Family flight from London is the main component of population loss, as they seek a better quality of life elsewhere in the UK. But this internal migration is outpaced by a growth in older people (we are living longer), as well as net international migration.^{3b} Some put the case that the growth in the number of households — and even people — has been suppressed by a lack of new housing supply. This is borne out in overcrowding statistics,⁴ particularly in the private rental sector (PRS).^c New supply appears to be the obvious answer to this continued growth, but a couple of considerations need to be covered off first.

Remote working has been accelerated by the pandemic, meaning that for many working citizens, their home location is now far more footloose. London's housing 'footprint' therefore feels more than ever like a regional matter, which surely requires a different and more robust planning framework than a 'Duty to Cooperate'.

Projected Population London



³ The components of this are hard to determine for London alone, but national stats suggest a combination of students, workers (many in healthcare) and humanitarian migrants

⁴ Household occupancy rate is very similar to the previous census (2.47 vs 2.5) and is impacted by affordability. If all households were housed optimally (i.e. not short of a bedroom) then the occupancy rate should go back nearer to 2.1 (the peak of 'space')

Source: Greater London Authority

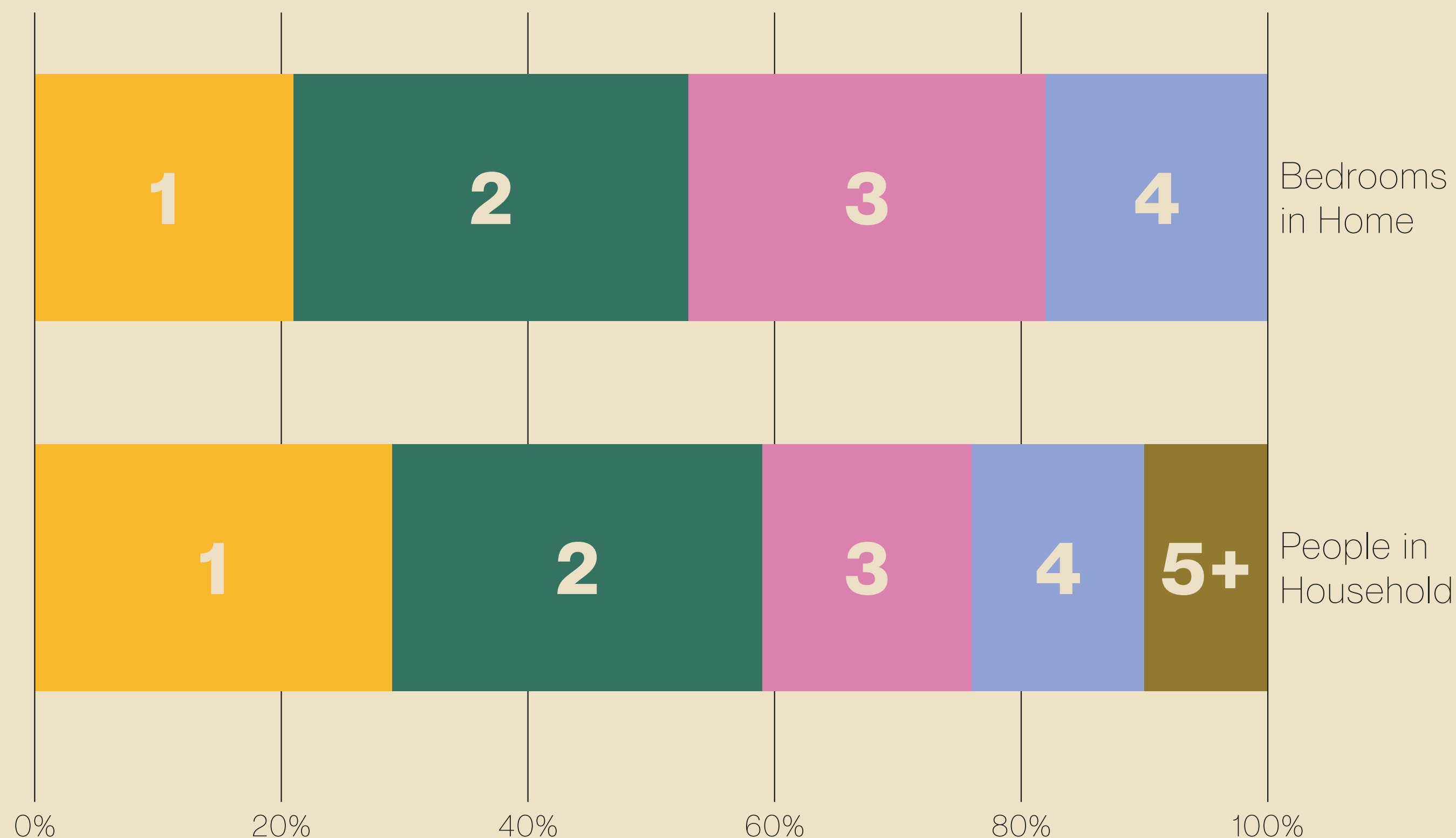
Should and could more New Towns (or London Overspill communities)^d be part of the answer to London’s housing conundrum? It’s important to remember that about 60 per cent of people (mostly in lower income jobs) very much still do need to live and work in reasonable proximity to the capital.^e London may be in danger of repeating the suburban flight which started in the 1930s, with the wealthier increasingly seeking a spacious and quieter life — a phenomenon which did not reverse until the 1990s. But perhaps city life will still be enough of a draw to sustain a mixed-income population.

Another frequently asked question is whether we have already built the square metres of space needed for London’s growing population. What is the extent of redundant office space (see adaptive re-use section), or homes which are empty, low-use or let as Airbnbs? The data on these latter three categories of home is not easily discoverable. Some figures⁵ put the total of all three at circa 135,000 homes (2022), but this may well understate the case as owners may not be declaring the actual use of their properties.⁶ It is worth noting though, that releasing 135,000 homes back into the general market would only make a small dent in London’s housing need. Spare rooms are also worth mentioning. Whilst many of these rooms (1.7m in the owner-occupied sector in London^f) are doubtless now being re-purposed as home offices, there are still a substantial number of retired households who

⁵ Source: Action on Empty Homes. See also Bourne and Mackenzie

⁶ The census figures put the figure at more like 300k (dwellings minus households) but this may be due to Covid anomalies

London Housing and Households 2021



Source: *ONS, census 2021 households; ONS, census 2021 dwellings*

are under-occupying. In former times, students would have taken up many of those spare rooms as ‘digs’, in return for a bit of babysitting. But this isn’t how the modern student chooses to live.⁷⁹ Add to this that many empty nesters are reluctant to downsize, and the race to build more square metres perpetuates in the capital.⁸

New supply

There are many well-rehearsed arguments about why the supply of new housing in London — and the UK generally — is low volume when compared for instance to the target set in the London Housing Strategy.⁹ Some argue that this is due to our highly constraining planning system, with developable land being rationed by the green belt and conservation areas. Others point to our complex planning negotiation and approvals processes which slow down consents as well as putting off smaller developers. The housebuilders’ financial model — which relies on eking out supply to maximise return — is cited as a further dampener. In spite of these challenges, the UK and London have in fact experienced two major new supply spikes in the last hundred years: the 1930s, and then the 1950s and 60s. The 30s saw a private sector housing boom enabled by new rail infrastructure, plentiful land supply, little planning constraint, a myriad of small housebuilders and cheap money. Only one of these conditions (new

railways) exists now. The 1950s and 60s saw a spike due to unprecedented subsidy into social housebuilding, including the New Towns programme. Affordable Homes grants since then have gradually reduced from meeting the full cost of delivering homes down to 20 per cent of project cost now.

So what levers do we need to pull today to create not just a greater volume of homes, but critically those which meet the citizen needs identified early in this study, namely affordability, quality of life, sustainability and local benefit? Each of these needs will be explored below, followed by the investment, design and construction initiatives emerging in London to address them.

“Infrastructure enables growth — there is a risk we stop being on the front foot and investing in infrastructure ahead of the need.”

Tom Goodall, Managing Director,
Related Argent

⁷ In fact, there are only c. 100k purpose-built student rooms in London, compared to c. 428k full time students, many of whom live at home according to the census.

⁸ Homeshare is an initiative which promotes intergenerational living in spare rooms – it is not known how many such individual arrangements exist in London.

⁹ For a comprehensive and historical look at new homes delivery in the UK, see Sam Watling who asserts that European housing delivery has historically outstripped ours, in terms of new homes per 1000 people.

“I was getting so many calls over that period [the pandemic] about the death of London — why would anyone want to live in London when they don’t need to be close to work? [But] soon after the restrictions were lifted ... people were flocking back to London even if they didn’t need to be in the office at all. There was a lot of reason to be in London that wasn’t all associated with work. But they also want the equivalent of a thriving village at the bottom of the lift where they live.”

Marcus Dixon, Director of UK Residential Research, JLL

“So many of these developments come through as studio, one, two beds. Flats that are built for ‘professional couples’ are increasingly housing families that they were not designed for.”

Sharon Strutt, Head of Regeneration, London Borough of Redbridge

Affordability

What are we aiming for?

→ 30 per cent (maximum) of gross income on housing costs

How are we doing?

- 24.7 per cent of gross income on housing costs — all tenures — median^h
- Private rents rising steeply — 42 per cent of gross incomeⁱ
- Nearly one million (or 30 per cent of households) on housing benefit^j

Overview

Housing affordability is one of London's most intractable problems, and yet perhaps the issue least able to be addressed by architects and developers.¹⁰ Rents and mortgage repayments are subject to market fluctuations for just over 50 per cent of London households, and are far higher than in the rest of the UK. London's household wealth and incomes, whilst higher than UK averages, are still low. It is worth reflecting first on the current tenure mix

of London homes, which does not reconcile well with the real financial circumstances of London households.

For those whose wealth and income is low, there exists social housing, currently at just over 21 per cent of the stock in London and vastly oversubscribed. Mid-market households split into two groups: the 'wealth poor' and the 'income poor'. The wealth poor can just about afford a mortgage but can't find a deposit (average £125,000^{11k} for first time buyers). The income poor might just about be able to scratch that deposit together, but can't afford the mortgage payments for a first time buy.¹² The wealth poor are also served by the private rental sector (PRS), which now constitutes nearly 28 per cent of the stock in London. But PRS rents are now punishingly high compared to average incomes, with two bed homes averaging £1,570 per month^l and 40 per cent of PRS households needing some housing benefit.^m And the competition for that PRS stock is increasing, with fewer social homes in the stock, more households unable to buy, and many others requiring temporary accommodation from their local council. The rising cost of mortgage debt and the approaching energy efficiency liability are causing some landlords to exit.

“The challenge is that a lot of these fringe London locations, where historically as a professional couple with kids you could have afforded a three bed terrace, they're now suddenly £1.5m and so you're being pushed further out to the point where if you're in zone six, you think 'I might as well go and live in St Albans'.”

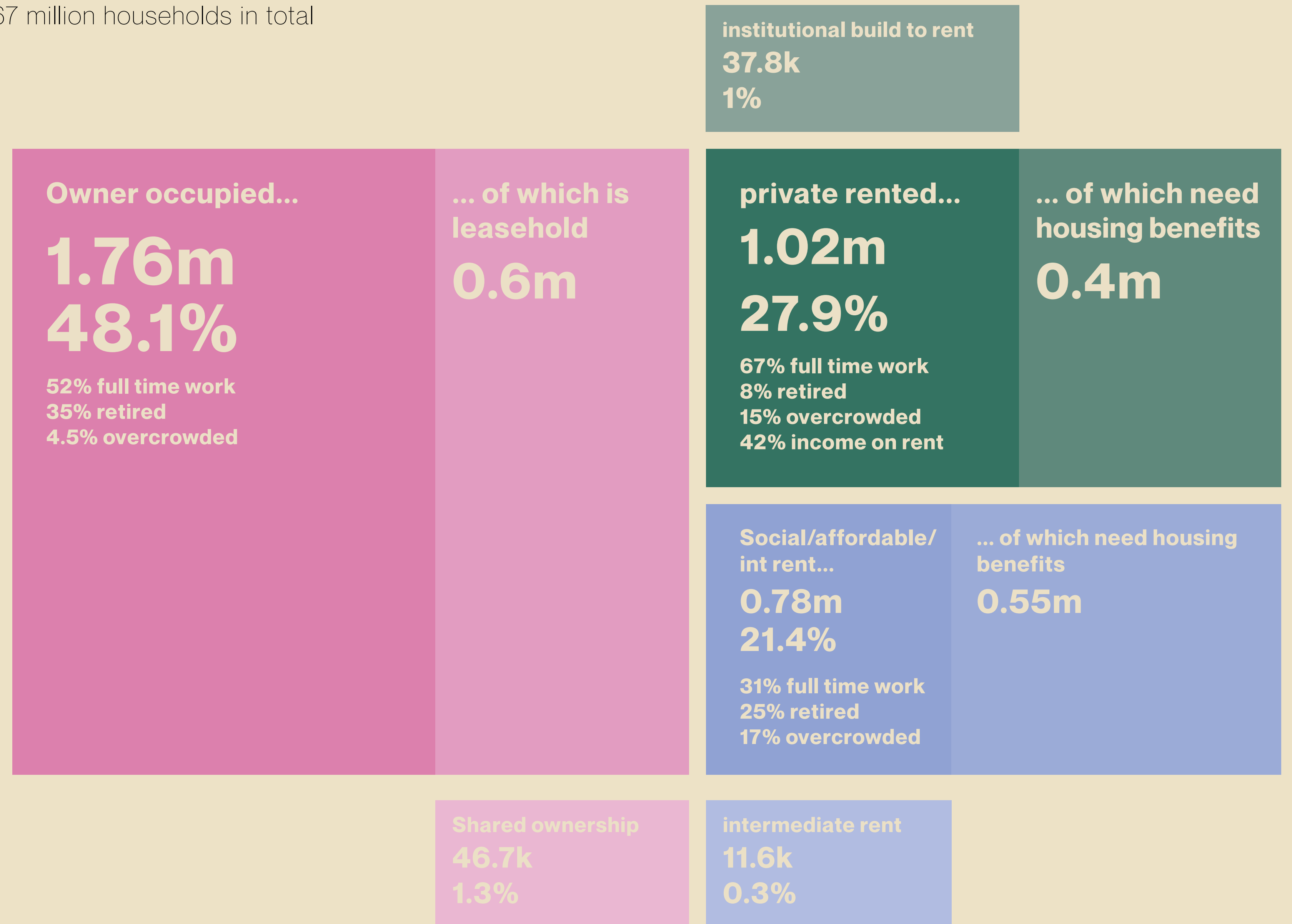
Marcus Dixon, Director of UK Residential Research, JLL

¹⁰ The savings generated by designing or building a cheaper home will not make their way to the customer, unless the public or non-profit sectors choose to do that.

¹¹ Even in a cheaper borough like Barking and Dagenham, a £66k deposit is required for a 2 bed flat.

¹² Which at £2,400 per month would require a £72k household income

London's housing mix and households 2021 – 3.67 million households in total



Source: ONS, DLUHC, GLA.ⁿ Note that there are c. 300k fewer 'households' recorded in the census (compared to 'dwellings') due to various empty, low use or other reasons.

Mid-market rent and affordable sale tenures also serve the income poor, but these homes are still vanishingly rare in London (58,000 homes, or 1.6 per cent of London's stock), leaving almost all of these households no option other than to rent privately as well. Are we also brewing a longer term problem of older private renting households who may struggle to afford rents at retirement?

How did we get to this place where London home values and rents are completely divorced from average wages? Land values have risen unchecked by taxation or other policy since the 1970s. Incentives for home ownership like Right to Buy,¹³ Help to Buy and cheap mortgage finance have proliferated. And overseas investment has been attracted to London for its long-term stability. So land and property values in the capital are now trapped at an inflated level where any correction, however wanted, would bring down the financial system, including people's pensions. New housing supply is part of the answer to enhanced affordability,¹⁴ but a low supply rate has been a structural issue for some time in London as we have seen. What is needed more than anything else is a steady and sizeable stream of new affordable homes. Such delivery over the past 40 years has fluctuated between 5,000 and 15,000 homes per year,¹⁵ probably reflecting short term political (and thus grant-giving) cycles as well as the fortunes of the property market, to which affordable housing (40 per cent

of which is delivered by developers on a cross-subsidy model) is inextricably linked. Intelligent use of public policy, funding and land, as well as the emergence of dedicated long term private investment may provide some solutions to increasing and stabilising affordable housing delivery in the capital. These levers are explored below.

Public policy and funding

Policies incentivising home ownership may increasingly not find an audience, as first-time buyers struggle to reach even the bottom rung of the ladder. But policies aimed at helping renters — such as private sector rent controls — can be hard to implement without causing some adverse effects.¹⁵ What is notable is that £8.4bn of Housing Benefit is accessed every year by around half of all renting households in London, almost half of whom are private renters.¹⁶ This is ten times the annual capital funding the government gives to the Mayor for developing new affordable homes, and represents over £1,000 per year for every London citizen. Surely there must be a case for re-directing this substantial subsidy towards building new stock, rather than enabling artificially inflated rental returns?

The importance of grant funding to boosting new affordable housing cannot be underestimated:^{16a} currently, less than £1bn annually is provided to gap fund London's

“If there is a potential development site, and the council doesn't have any ambition or capability to bring it forward within say five years, then that should be offered up to community groups.”

Oliver Bulleid,
Executive Director,
London CLT

“Lack of housing is losing the state a vast amount of money at the moment so I think one has to look at the economics of it in a much broader way.”

Peter Vernon, Chair, Grosvenor
Hart Homes

¹³ Right to Buy has seen nearly 300k or 8% (as seen from today) of London's housing stock transferred from public to private sector over 40 or so years.

¹⁴ It is worth noting that increasing volume alone is not the answer to affordable housing supply. Vancouver has three times the delivery per capita and hectare than London, but this has not improved affordability for the average citizen.

¹⁵ International commentators and charities mention reductions in new build BTR supply as well as failures to repair by landlords and tenants not moving home.

¹⁶ Even in 1960 this was mentioned in parliament by the MP for Fulham as the key mechanism for boosting supply.

affordable supply.¹⁷ Low-cost infrastructure funding has also been critical to the success of schemes like Brent Cross, Meridian Water, and Silvertown, where the private sector could not have forward-funded the enabling works. This funding too has been limited, and may not find its way to London in future as the country seeks to ‘level up’. Any decision to increase grant or loan funding is a central government matter in the UK but elsewhere, cities have more fiscal autonomy. The city of Vienna charges its citizens 1 per cent on income to boost public sector housing supply. Whilst acknowledging that the Mayor of London has no such power, this would amount to something like £1.6bn a year if levied in our capital.¹⁸

Public land

The identification, enabling and purposeful disposal of public land has the potential to be the most important factor in the creation of new affordable housing in London.¹⁷ The question often arises: how much of London’s land area is in public ownership? Whilst there is now a map of this land,¹⁸ the hectareage and developability of it is not clear. An extract is shown to the right, demonstrating quite how much there is in central south London. 400 hectares are hospital land alone.

In mainland Europe, city authorities use working capital to bring more land forward. They often assemble land, provide infrastructure, remediate the land and get an

¹⁷ LB Southwark has recently convened a Land Commission whose aim is to bring together a panel of experts, community groups and major landowners to free up more of Southwark’s land, for the benefit of local people.

“The way that development partners are selected [on public land] does not always get the best answer for everyone. They [councils] have to show that they are getting ‘best value’, but are they considering all types of value, including social and environmental value?”

Victoria Manston, Development Director, Hub Residential

“If you see land as a community asset and part of the circular economy, the last thing you want to do is sell it off as a one-off thing, and no longer have any control or community benefit.”

Oliver Bulleid, Executive Director, London CLT



- Greater London Authority
- London Fire Brigade
- London Legacy Development Corporation
- Mayor's Office for Policing and Crime
- Transport for London
- Other public land

Source:
*Mayor of London/
HM Land Registry*



Brent Cross Town, in the LB Barnet, is a new neighborhood in North London and is one of Europe's largest town centre developments, with Related Argent delivering in partnership with Barnet Council. Completion in 2035.



Meridian Water in the LB Enfield is one of largest regeneration opportunities, and ideally placed to deliver the spatial, sustainable and economic resilience objectives of the London Borough of Enfield. Completion by 2040.

outline consent, before disposing of parcels (with strict quality conditions) to the private sector to deliver.¹⁸ This kind of large-scale land enabling in London is constrained by weak compulsory purchase powers, the inability to borrow sufficient working capital and a dearth of public sector skills in guiding such projects. Mayoral Development Corporations have made good headway at Queen Elizabeth Olympic Park and reasonable progress at Barking Riverside, but land ownership issues at Old Oak Common have constrained its development. The Law Commission's new review of compulsory purchase may prove very useful, and Labour, if elected, proposes to allow councils to purchase land for new homes at existing use value.

Valuing land whilst factoring in the desired brief for a site is the most obvious way to reduce development costs (and hence enable far more affordable homes). Public authorities can develop on or dispose of land at a value which takes social and environmental benefits into account (which affordable housing clearly meets). Peter Bill and Jackie Sadek's proposal for 'Public Rental Homes'^u relies on this mechanism, as do Community Led Housing schemes such as Citizens' House in Lewisham.^v Its developer, London CLT, is able to offer the homes for sale at a discount in perpetuity, with values relating to local incomes. The GLA's Small Sites Small Builders scheme^w aims to bring trickier bits of public land¹⁹ to a small builder/ developer market. This broadens

out the set of people delivering new homes, and helps to fuel more local small and medium size-enterprise (SME) activity in a way that larger developers find harder. TfL's Beechwood Drive is an example of where a small site was taken on by a smaller developer and optimised.

But there are challenges with 'social' land valuations and small sites. Many authorities do not consider that they can use their powers to dispose of land at a 'social value'²⁰, and the process for agreeing and then executing land deals on this basis can prove very protracted. An unambiguous direction is needed from central government to allow more authorities to use or dispose of their land at this 'social value' to enable more affordable housing development.²¹ And small sites — whilst worth pursuing in principle — can prove costly due to the amount of effort required for a small outturn. Community-led housing proponents are calling for improved public sector knowledge including a clear developable public land database, a marketing hub, template land disposal documents, and early-stage funding support. In the Netherlands, community-led housing is often carved out as a specific element of a much larger development, which seems like an easier way to achieve these 'intentional communities'. This is happening on a small scale in London at East Wick and Sweetwater in Queen Elizabeth Olympic Park.^x

¹⁸ This master development role is played in part or in full by Homes England in the rest of England.

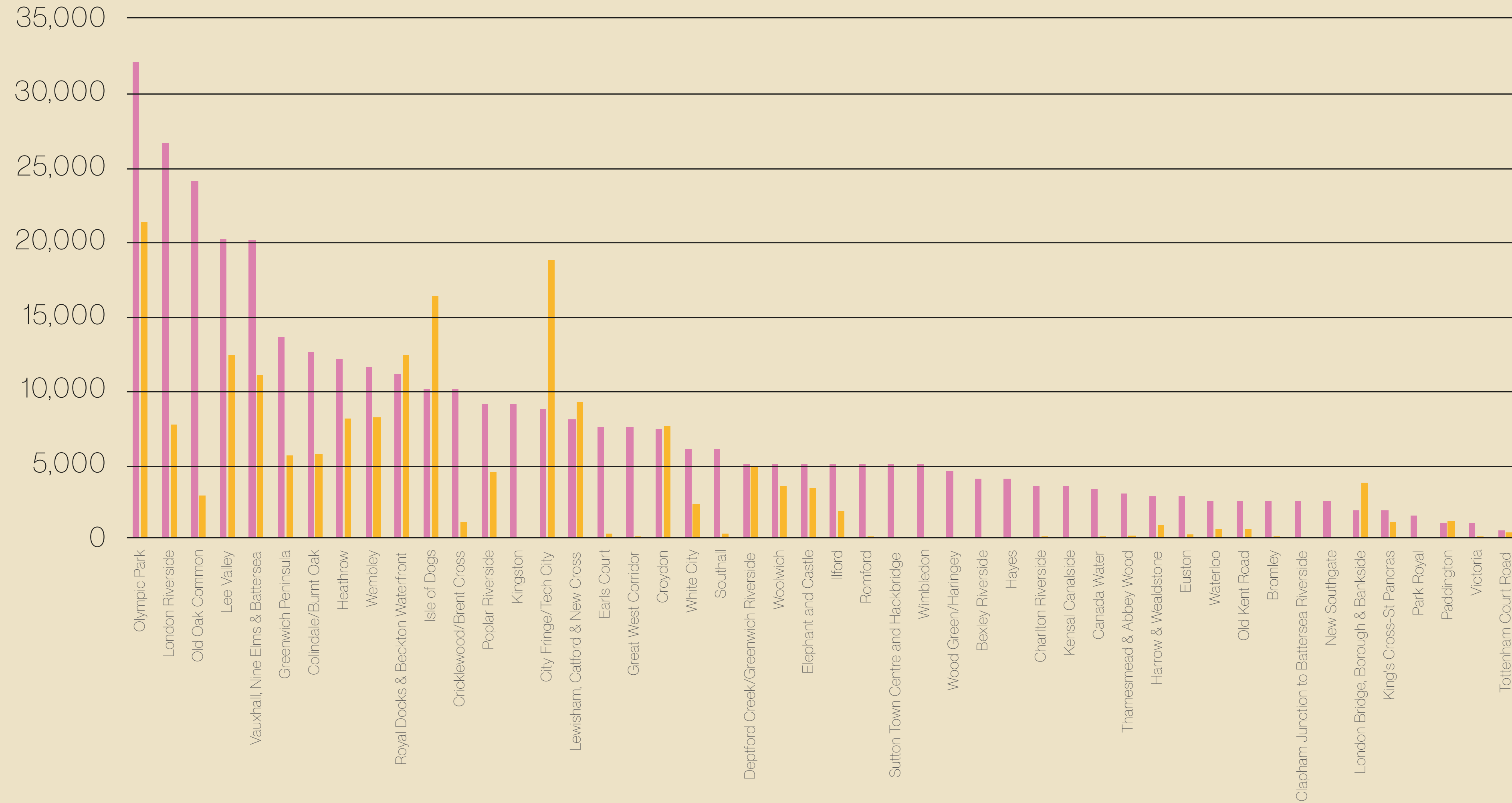
¹⁹ Russell Curtis at RCKa has recently used AI technology to find every small site in London.

²⁰ My term. It is important not to use the term 'discounted' value, as it implies a subsidy; whereas in fact the land is a 'market' value, just with publicly beneficial constraints on what the market can do on the site.

²¹ See a full explanation of the challenges of valuing land in chapter 2 of this 2018 Trowers and Hamilins report

Opportunity Areas — Capacity vs Completion

Capacity Completion



Opportunity Areas

Source: *OA residential dashboards, GLA*



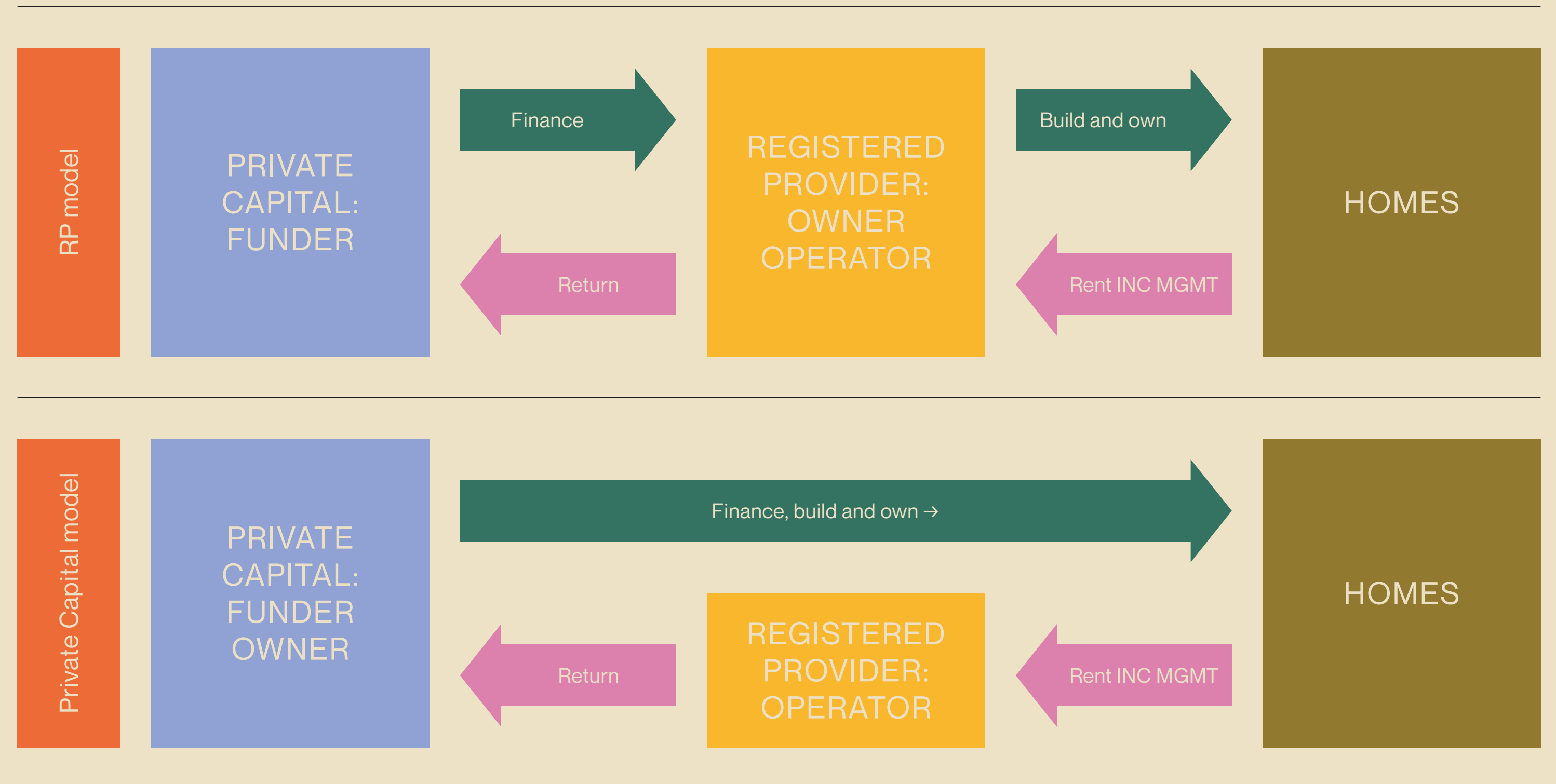
Portlands Place, Queen Elizabeth Olympic Park by Hawkins/Brown and Get Living is a development comprising of 524 new build-to-rent homes, varying from studios to 4-bedroom homes. Completed in 2022. © Simon Kennedy

Patient capital

Are there any modern-day George Peabodys, looking to generate a ‘philanthropic’ return on capital? The investment world is beginning to move in that direction, as money is increasingly seeking longer term returns for socially and environmentally sound developments.²² The key will be in whether that patient capital can combine with enough public funding to allow a sufficient return. Opportunity London Partnership is considering a new ‘London Affordable Housing Fund’²³, which aims to attract multiple public land-based projects. Homes would be let at a mid-market rent and be net zero carbon in order to qualify for the fund. Registered Providers (RPs, often housing associations) have been using a similar model for years, but as a sector, they are currently undergoing stress and their influence in new delivery may be suppressed for some years. Their role in the private investment scenario would be as operators of the affordable homes, and possibly owners over time if the fund is set up to exit after say 50 years. For-profit RPs are also emerging to fill the mid-market gap.

Funds could also consider buying up existing PRS homes in the capital, refurbishing them to a net-zero ready standard, and renting them out at London Living Rent. Public sector match-funding might then be released in the form of surplus housing benefit. This would vastly improve the affordability,

Diagram of the potential interactions between registered providers (RP’s) and private capital in new home delivery



²² See Business London and CBRE report

²³ There is a history of this: The London County Council raised money during the 1920s through selling London housing bonds which promised investors a 6% return and raised £4 million. If 30k new affordable homes are needed per year now, this might require investment of £12bn a year.



Citizens House is the first community land trust in London that has been directly created by the community using London CLT's unique affordability model, in partnership with Lewisham Citizens, Lewisham Council and the Greater London Authority. Completed in 2023 © French+Tye



East Wick + Sweetwater by Studio Egret West, astudio London and Places for People in the LB Hackney and is the first phase of a new neighbourhood in Queen Elizabeth Olympic Park has been completed in 2021, providing the area with 302 homes, a nursery and a Co-op branch. © Chris Hopkinson, Chromaphotography

“Whatever we can do to encourage responsible long term patient private capital into the [affordable housing] sector must be a good thing”

Peter Vernon,
Chair, Grosvenor
Hart Homes

“Impact investing and social finance models are emerging to attract private capital, and you’ll find now that when it comes to investment — particularly around ESG — that people won’t put money in things that are not providing wider social and environmental benefits”

Victoria Manston, Development
Director, Hub Residential

quality of life and sustainability of up to a million homes in London. The Mayor of London is also returning London's existing stock to affordable tenure — 1,500 already converted — through his Right to Buy Back programme.^y

Build-to-Rent (BTR), now 1 per cent of London's stock, demonstrates the attraction of institutional investment to rental housing. Its delivery has come from virtually nothing 10 years ago and now accounts for over 15 per cent of London housing completions.^z BTR homes are not an affordable tenure, but do address a particular segment of the 'wealth poor', whilst generally requiring a higher incomes than are expected in the wider PRS sector.²⁴ Some report that delivery of BTR in London has recently slowed down, citing both viability and planning uncertainty as the key blockers in the capital.

Cost efficiency

Cost efficiency alone is not enough to make anything affordable; those savings need to be passed on to the eventual customer and not extracted by the supply chain.²⁵ A low-cost model which enables a cheaper sale price is being trialled by start-up developer Naked House,^{aa} in Enfield. This model also benefits from 'social value' land from the council, and the price paid for the home (typically 70–80 per cent of market value) is capped at build cost. Naked Houses are pared back to the shell and allow resident fit-out and extension over time, saving

on development costs and enabling the discount, which exists in perpetuity. Pocket Homes^{ab} reduce price, rather than cost. Their homes are smaller than average but smartly planned, and come with a 20 per cent discount to open market value. They can also only be sold on to eligible households, meaning they remain with lower income households in perpetuity.

Standardisation ought to reduce costs through bulk purchasing of components and rationalisation of supply chains. The volume housebuilders do this in suburban locations, George Peabody did it in urban London in the 19th century, and Wates and Wimpey supplied local councils with various standard blocks after World War Two. Current models of urban housing standardisation include Modern Methods of Construction (MMC), being taken up in particular by the BTR and Co-Living sectors, whose product is more standardised and stackable. So why couldn't there be a new standard six storey mansion block, made by licensed manufacturers from standard components or modules, ready to roll out to outer London councils? Experts point to three issues: the basic challenge of mobilising and fully integrating a new supply chain which can deliver to order, the planning system (whose delays and wish to see bespoke buildings give no certainty of pipeline), and council procurement rules which inhibit the purchase of turnkey buildings. Enlightened councils may wish to consider how these latter two barriers could be removed via a pre-approval regime.

“Even if I had all the money in the world, I couldn't do what I wanted to do because I just don't have the people. At one stage, we had run out of scaffolding in the country, and even if we had scaffolding, we didn't have scaffolders to put it up.”

Fiona Fletcher-Smith,
Chief Executive, L&Q

²⁴ Some data shows that 23% of BTR homes are in fact rented by students.

²⁵ Many socially-minded developers state that there is just too much 'value extraction' all the way through the development process which results in a loss of affordable homes. This can be through multiple site deals, planning complexity or through excessive risk pricing of construction, especially for public sector developers. How can this be addressed?

Quality of Life

What are we aiming for?

- Existing homes: meet Decent Homes Standard^{ac} as a basic measure
- New homes: London Plan policies
- Stretch standard for new homes: Fitwel^{ad}

How are we doing?

- 15 per cent affordable^{ae} and 20 per cent private rented homes^{af} do not meet the Decent Homes Standard
- Some London Plan policies are guidance rather than being mandated (e.g. aspect)
- Some high-end developments are targeting named quality standards

Overview

Quality of Life (QoL) has risen to the top of everyone's agenda since the pandemic. QoL might encompass everything from feelings of connectedness (e.g. social and transport infrastructure), belonging (e.g. shared resident amenities), comfort and health (e.g. working or playing from home), and finally control (e.g. over management and tenure

length). In general, enhancing most of these comes with a cost, and hence impacts viability, and hampers the ability for those developers seeking to deliver enhanced QoL to win private land. Whilst planning and building regulations tend to level the playing field somewhat, rental sector investors are now seeking enhanced quality through their need to demonstrate Environmental, Social and Governance (ESG) outcomes. Organisations like igloo have pioneered a quality-driven investment approach for years;^{26ag} but it is notable that they have tended to work in lower value areas or on public land. Might the new generation of George Peabodys make that approach mainstream?

Before exploring QoL issues in more depth, it's important to note that nearly 90 per cent of London's new supply is in the form of flats^{ah}, and about 1 new home in 7 is now in a 20+ storey tower.^{ai} This higher rise supply profile is a product of land economics alone, and therefore does not necessarily reflect the profile of homes aspired to or needed by very varied London households. The demand and supply mismatch throws up a number of issues, including the vexed question of whether families — especially those with no choice — should be asked to live at high rise.

“People want big open spaces — they don't want the well-manicured as much as the free-to-roam kind of spaces, more natural, the places that look good when you go for a no-mow May!”

Fiona Fletcher-Smith, Chief Executive, L&Q

26 Igloo uses a thorough quality of life framework called Footprint which is mandatory for their developments

Standards

At the most basic level of quality, existing affordable homes must meet the Decent Homes Standard. 15 per cent of affordable rented homes and 20 per cent of private rented homes do not currently meet that basic standard, with private rented homes due to be regulated shortly. Building Regulations — the baseline guardian of new build quality — have recently been shown to be ambiguous and problematic, and also poorly enforced and inspected. They are currently undergoing slow and less than coherent change, which is confusing the sector and slowing down delivery substantially. The London Plan sets a good QoL bar; but those involved in Design Review for local authorities still see ever deeper flat plans off ever longer corridors. New guidance on dual aspect homes may send that into reverse, but in reality, compromises on aspect are still the norm.²⁷ A ‘metrics race’ is now being run in higher end housing delivery, as investors want to prove their scheme beats the competition on QoL. Fitwel is a US standard which now enables cheaper borrowing by both developers and purchasers. Those purchasing retirement housing are becoming more discerning, seeking named quality of life metrics when choosing their ‘last-time-buy’.

Neighbourhood infrastructure

Quality of Life is of course associated with many things

²⁷ Tower Hamlets has set its own excellent detailed standards for high density housing as planning policy; but there is always a danger of layering on too much complexity and compliance.



'Barking Riverside in the LB Barking and Dagenham is a joint venture between L&Q and the Mayor of London to deliver one of Europe's largest mixed-use placemaking projects. Masterplan led by Lifschutz Davidson Sandilands.

beyond housing, not least access to social, cultural and transport infrastructure. Post-pandemic for instance, the active demand for better access to nature has been observed. This is something offered in larger regenerating places like Barking Riverside and Thamesmead, which both now have Park Runs — perhaps a new indicator of liveability. But how often is there a chance for London housing developments to influence neighbourhood-scale QoL? More than it might be imagined. London’s 47 Opportunity Areas (OAs)^{aj} — a planning designation now nearly 20 years old — are of that scale. They have seen the delivery of 177,000 new homes, with as many more in the pipeline, and have yielded about 40–50 per cent of all London’s housing delivery in recent years.^{ak} Argent/Related Argent developments at King’s Cross and Brent Cross Town start with a place vision and aim to build value and QoL over a very long term arc.²⁸ But how successful have all the OAs been at delivering QoL for a wide variety of citizens? The truth is that we have not yet measured this in detail, beyond some interesting anecdotal articles over the last few years.²⁹ It feels like the right time for a 20th anniversary review of the most advanced OAs — such as Elephant and Castle, Nine Elms and Wembley — to check on perceived QoL, and to see what factors enabled that. The Quality of Life Foundation’s six principles^{al} might provide a useful framework for that research. At Brent Cross Town a Flourishing Index is being developed by Buro Happold and

the University of Manchester which will seek to understand the impact of the development on the wellbeing of the community.

Shared spaces and services

Zooming in one level, spaces shared by discrete resident communities are making a comeback. The pandemic has even seen them evolving amongst the existing streets and houses of London, in the form of Low Traffic Neighbourhoods. Suddenly, people who never thought they wanted to live in a car-free area have a safe spot for children to travel and play out amongst friends. And people have realised that the ‘one minute city’ — ‘how can I easily interact with my neighbours’ — is as important as the 15 minute one.³⁰ Such communal amenities have been perhaps the least understood and least valued areas of housing in the UK for decades. The 1930s saw the delivery of circa 200 blocks of flats for rent in London, with examples such as Dolphin Square, which contains a huge garden and a variety of other resident amenities. Post-war estates often contained community spaces, shops and GPs — but these were perhaps blighted through economic hardship and a lack of resource to manage them well. There’s no good reason why communal spaces — and they don’t have to be glitzy or expensive³¹ — could not make their way back into any form of urban housing of scale, but there is little policy to

²⁸ These projects are unusual in London in their single land ownership and control, which perhaps allows trust and place to be generated from the outset.

²⁹ See also NLA’s Changing Face of London reports (latest 2020)

³⁰ The ‘15 minute city’ has become shorthand for a certain kind of ‘quality of life’ based on having key social amenities within 15 minutes’ walk of homes. Many commentators have remarked that this concept does not fit well with London’s mega-city model, which by definition means that life is lived in a variety of 1 minute, 15 minute and 60 minute modes. London’s huge size also means at least an hour’s travel to work for many, who may then also choose to shop or eat outside their neighbourhood. So it’s complicated.

³¹ A new word has entered the lexicon — ‘over-amenitised’ — to describe a development which has gone over the top with its shared spaces...

“We have a multi-purpose space where you can socialise with your friends in the evening, and we’ve got a ground floor workspace, all amenities that London buyers have come to expect.”

Elizabeth Wright, Senior Development Manager, Muse

“Families won’t move into an area on the promise that in five years’ time there’s going to be some great local amenity for them, because the kids have grown up! So it’s too late — you have to do it first: the immediacy really matters.”

Tom Goodall, Managing Director, Related Argent

encourage this, save for shared garden allowances. Where will residents store the chairs and tables needed for a few events? Where can they hold a meeting or a child's party? Where is the gardening equipment? Where are the shared tools and play equipment kept? Where can people rent more personal storage³² if they want it? Perhaps a policy is not needed. Developers from Hackney Council to Hill are now putting rooftop garden rooms and neighbourhood co-working hubs into their briefs to architects.

Today's shared space revival, largely led by Build to Rent developers, is a welcome and interesting phenomenon, especially for single households (over 1m in London^{am}). The shared amenities offered by BTR — a tenure and 'lifestyle' import from the US — represent a tangibly different quality of life for this 3.8 per cent of private rent households. The most popular services reported^{an} by BTR operators are the concierge and social events, demonstrating quite how much people value other people in housing of this kind. Shared gardens also come high up the list of priorities. All of these amenities also come with a cost, and households in BTR tend to have higher incomes to match the higher rentals charged. Recent BTR completions include Ten Degrees in Croydon,^{ao} with 500 homes in tower format, and amenities including a 24/7 concierge, co-working space, gym and games lounge. Even pets are allowed — something renters in Toronto are more than familiar with.



Nine Elms by Morris + Company and London Square in the LB Wandsworth is a circa 300 home development arranged around a resident's courtyard, shared amenity and mixed use spaces. Completion in 2024. © Morris + Company

³² Cycle storage in particular is a policy obsession: why not give every home a large store, which they can then use either for bikes or other items which are more relevant to their lifestyle?

A cheaper alternative to BTR is Co-Living, aimed at renters aged 26–45 on a £30,000+ income who want to live alone but within a community. This tenure is still in its infancy, and although it has suffered from some failure during the pandemic, there are now 2,000 homes completed and a further 10,000 homes in the pipeline in London.^{33ap} Space and other standards were consulted on by the GLA during 2022, but no standard has yet emerged as policy. Units of 18 sqm were designed in early schemes, but investors are finding that 20-25 sqm micro-homes rent better and induce a longer stay. Lenders are now getting more comfortable with the asset type, but recent planning refusals show that some local authorities are still nervous.^{aq}

As we have seen, London’s older households are rapidly increasing in number, and their needs are not well met by the current stock. Many older households will not want to live in specialist housing, but many now do, having seen newer retirement products coming forward.³⁴ Some estimates^{ar} show London’s demand for 26,000 new homes for housing-with-care alone, as over-75s in particular increasingly value both the care and the shared spaces and services which these developments offer. Notable Councils in London for their proactive planning policies to enable housing for older people are the Royal Borough of Kensington and Chelsea, London Borough of Camden, London Borough of Southwark and London Borough of



Ten Degrees in the LB Croydon by HTA and Tide Construction is the world’s tallest modular building delivered in just 26 months using modern methods of construction, completed in 2020.
© HTA Design LLP

“The beauty of having a demanding rental community where they have choices, is that it makes you up your game. I kind of love that idea that we are entering a world now which is being more led by the people. It really forces developers to focus on that quality of ground floor experience, maintenance, safety, listening to customers, responding to challenges and not being a faceless custodian — having an identity and being accountable.”

Tom Goodall, Managing Director,
Related Argent

³³ Some say that there is potential demand for as many as 160k co-living homes in the capital.

³⁴ There are c. 65k specialist homes for older people in London, 80% of which are affordable tenure and increasingly out of date. Only 10% of these homes in London are ‘housing-with-care’. Such housing would save public spending on health and care, but developers are unable to use this benefit as a planning argument.

Brent. However, some developers consider that delivery of specialist housing is constrained in London due to a lack of sector regulation and planning uncertainty, causing viability issues.³⁵ Shared spaces and services are now more of a burden for the affordable end of the market, where service charges cannot always be met through welfare payments. This is a great shame, as it is that ability to interact with neighbours and combat loneliness which is of such value to these citizens. Tonic, whose LGBT+ retirement housing in Lambeth opened in 2022,^{as} shows what can be done. Multiple tenures and shared spaces sit together in this scheme, which also delivers care.

It is notable, looking back at this section on shared amenities, that housing developments appear to be becoming more ‘lifestyle specific’.³⁶ Why has this happened? Perhaps it is because funding, building and operating buildings for one type of customer is just easier. But is this the right way to go? Some citizens may well want to live with their peers, but for many others, an intergenerational community is a far more life-enhancing ecosystem. There are some inspiring examples from the Project Showcase, such as Levitt Bernstein’s Melfield Gardens project in Lewisham and Jestico + Whiles’ Vincent Street, Canning Town project. Might it be good for the housing development sector to reflect on whether a lifestyle monoculture is what citizens really want?

Comfort, health and safety

Space to work from home was being considered for some years by academics and architects before the pandemic — but now, it’s a material issue for many households. It is pretty extraordinary that millions of square feet of ‘workspace real estate’ has been transferred almost overnight from large buildings in the centre of town to individual homes.³⁷ In the private sector, households can choose and use a spare bedroom, if they can afford it. L&Q is clear that home-working is not just the preserve of the wealthier, with many of its own call-centre staff now home-based. It now has a policy of offering an ‘extra living room’ to some of its new build residents, which can be used for playing or working from home. It is also de-designating box rooms in some of its existing stock so that a family household can have another room without the worry of paying extra for a spare bedroom. Research by London Met^{at} shows that a six square metre space is adequate for many homeworkers.

Environmental comfort in both existing and new homes has rightly risen up the agenda; but new urban homes now suffer from a perfect storm of competing environmental requirements including acoustics, overheating, aspect and daylighting. Dual aspect homes and opening windows provide essential natural ventilation mechanisms, but

“I think as we make buildings more and more airtight and spend more on thermal performance, there will be a need to do some form of tempering... creating spaces that are more comfortable for people.”

Mark Wilkinson, Director,
Hoare Lea

³⁵ Such housing would save public spending on health and care, but developers are unable to use this benefit as a planning argument.

³⁶ Planning policy has not caught up with this trend, insisting on a rigid tenure and size mix for any given development, which is proving a barrier to these specialist providers.

³⁷ The associated rental savings being made by companies have not yet found their way to employee pockets to help them expand their living space...

neither of these counts towards ventilation if there's even a slightly noisy environment outside. This means onerous ventilation equipment is required. Has sensitivity about noise gone too far? Fire safety for residents is also rightly a major topic of discussion, with changing regulations not only for developers and designers but also for landlords and residents. Housing secretary Michael Gove announced in July 2023 that the government will require two staircases in all new residential high-rises taller than 18m, rather than the 30m threshold previously proposed, finally ending the speculation surrounding this contentious policy.^{au} Many councils are facing challenges with their existing and emerging stock, and residents have less confidence in higher rise living than they once did³⁸. Now that regulation has settled and we have clarity³⁹, this should give confidence back to both developers and residents.

Control, security and stewardship

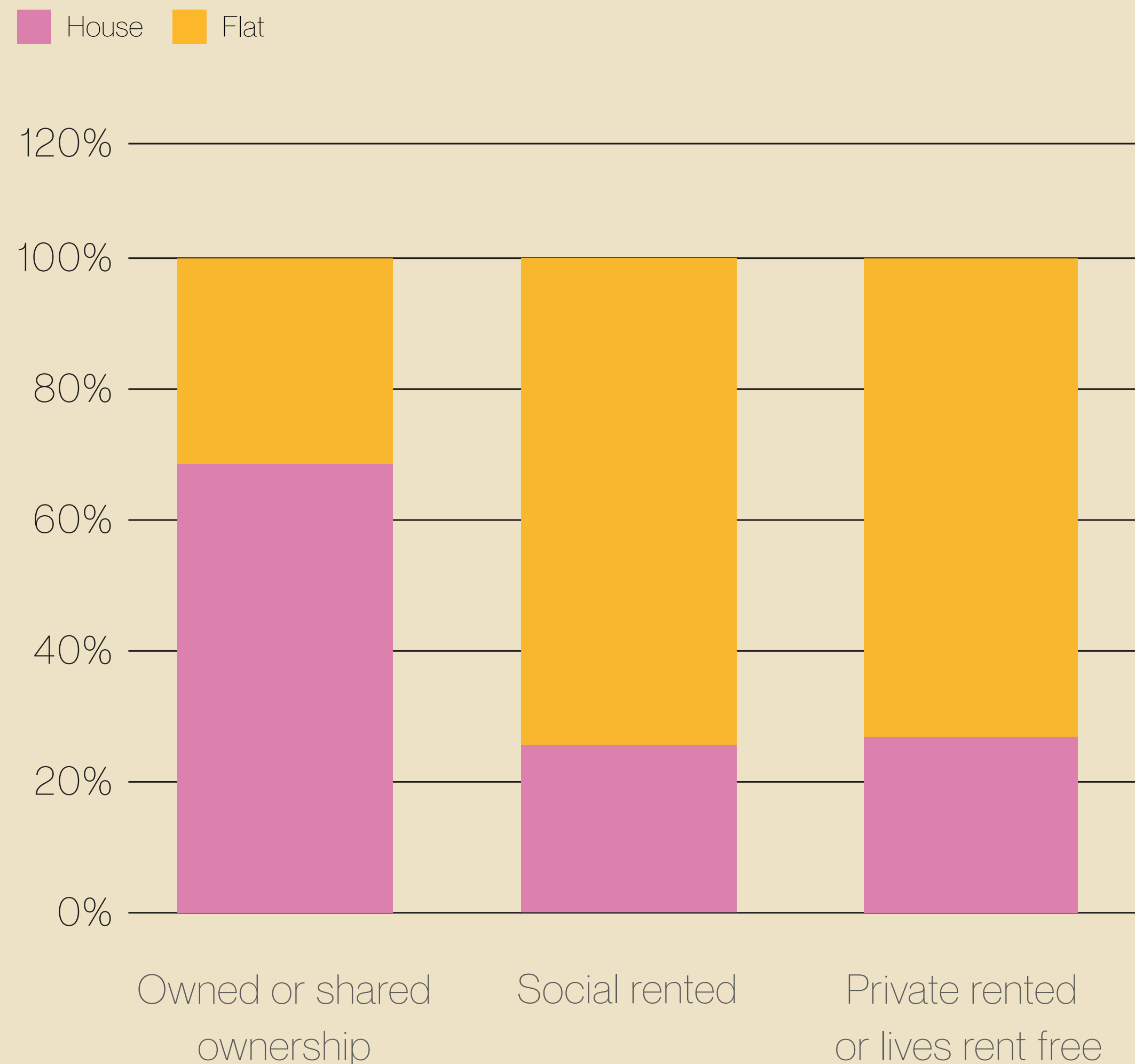
Control and security of one's home are where inequality is perhaps starkest in London. Rough sleeping is on the rise in London, and the City of London is beginning to address this through the creation of 28-day sleeping pods in an old church school⁴⁰. The further 1.6 per cent of London households^{av} who are homeless or in temporary accommodation (TA) in the capital also experience deep insecurity. These households include 80,000 children whose lives are profoundly disrupted,

³⁸ New fire regs are also changing lifts lobby and exit design, meaning that less incidental encounter is possible in those all important common areas.

³⁹ NLA's 2023 tall buildings report estimates that 120k homes are stalled on account of second staircase confusion

⁴⁰ This initiative at Snow Hill Court builds on work done by Commonwealth and Reed Watts Architects, where 4 sqm plywood pods were used to house migrant workers who would otherwise have been in tents or open church halls.

Tenure and home type — London



Source: Census 2021 from the Office of National Statistics

and who may struggle to build secure lives from this unstable foundation. New initiatives are emerging to give at least some stability to these citizens, including Capital Letters^{aw}, acquisitions programmes (London Borough of Newham) and London Borough of Camden’s building of new hostels⁴¹. But emergency and temporary accommodation is an unregulated activity, and some are calling for defined planning use classes and standards/design guidance for retrofit or new build TA^{ax}. Whilst this may invite concern (in case it becomes a new sub-standard class of housing), proponents argue that a 25 sqm⁴² temporary home is better than a B&B room or poor-quality office conversion by a rogue landlord. It would also save London councils at least some of the £660m they currently spend on private TA.

Social renting residents may have security over tenure and costs, but sometimes feel powerless in terms of management. For private renters, the new Renters Reform Bill^{ay} is welcome. It does not go as far as many would like, but at least gives some security of tenure and rent levels to tenants. Half of London boroughs now have private rental licensing schemes; these need to be extended and strengthened, but councils do not currently have resource for this⁴³. It will be interesting to see what impact the rental reforms have on landlords divesting of stock⁴⁴. Leasehold reform, however, has been watered down and delayed. Even in London, there is still a cultural obsession that houses are the ‘default’ typology and that flat-living is the ‘meanwhile’

option before ‘graduation’ to a house. With 90 per cent of London’s new homes inevitably being leasehold flats (other options are not viable), this culture must evolve. The priority needs to be twofold: designing far better family flats, and upskilling residents in estate stewardship, helping people to understand their rights and responsibilities.

Post-occupancy review

How do we know we’re getting QoL right? The built environment industry is notoriously poor at meaningful post occupancy research, usually citing reasons of insurance, reputation and a lack of funding. The sector needs to consider how it can de-risk this, and then invest in policy and product evolution so that the customers — London citizens — are properly served. London Legacy Development Corporation recently undertook a comprehensive report on its Chobham Manor scheme,^{az} which makes very valuable reading. Perhaps it’s time for Design for Homes,^{ba} The Good Homes Alliance^{bb} and the Housing Forum^{bc} to get together and form a truly powerful national ‘Housing Centre’ where best practice can be shared more efficiently and with power.

“It’s extremely difficult to get direct contact with the residents — it’s almost impossible to ever get back into the project, or to get a commission from the client to do POE.”

Melissa Dowler,
Director, Bell Phillips

⁴¹ e.g. Camden Road Hostel by RCKa

⁴² Some may note the space comparison with Co-Living homes which have found acceptance in planning.

⁴³ This ‘lack of council resource to police policy and regulation’ feels like a pattern. How can this be addressed?

⁴⁴ Perhaps today’s George Peabodys can buy it as the HAs did in the 1960s?



Located within the Queen Elizabeth Olympic Park, Chobham Manor by PRP Architects and LLDC, in the LB Newham provides 880 dwellings in a mixed-use masterplan, a nursery, community centre and a number of commercial units. Completed in 2022. © PRP

Sustainability

What are we aiming at?

- Legacy stock - halving heat demand (to 65kwh/sqm/yr) and electrifying supply
- New Build — net zero carbon (via the Future Homes Standard) and regulation on embodied carbon

How are we doing?

- We're doing well on new build operational carbon, but retrofitting the existing stock and regulating embodied carbon have a long way to go.

Overview

The energy crisis of the last couple of years has certainly focused minds on the inefficiency of London's existing housing stock, but the whole built environment sector appears still to lack a definitive plan or leadership for how to get London's stock retrofitted by 2050. For new build, operational carbon has been legislated for in increasing increments over the last ten years, leading to the Future Homes Standard, due to be adopted in 2025.^{bd} Homes

must be 'zero carbon ready', i.e. not need any more retrofit to achieve net zero carbon — only greening the grid will be required to get it over that line. Innovations are also emerging in energy management systems, which allow e.g. electricity generated by solar energy to be stored for when it's needed. The real challenge is the embodied carbon in actually building the homes, maintaining them through their lifecycle and demolishing them.

Retrofit

London's landlords are under pressure to get their homes to the government's energy efficiency target of EPC C (by 2028 for private landlords, 2030–35 for social landlords.^{45be})⁴⁶ EPC targets are seen by many as crude however, incentivising works which may not be optimal in reducing carbon emissions. To that end, LETI^{bf} is due to publish a new report in September 2023 which shows how to optimise fabric works to homes in anticipation of the gradual decarbonisation of the grid.⁴⁷ This approach (LETI Basic⁴⁸) results in an average cost of just under £20,000 per home, or a c. £60bn price tag overall for London. But where is the money for retrofit coming from? Probably a

“We heard that just in one borough, a thousand technical people are needed to get out there and roll this [retrofit] out. There's a huge skills gap.”

Mark Baigent, Corporate Director of Regeneration and Culture, LB Redbridge

⁴⁵ London Councils' Retrofit Action Plan is aiming for EPC B, at an average cost of £13k per property.

⁴⁶ Energy Performance Certificates are a standardised and widely understood way of monitoring the energy efficiency of homes.

⁴⁷ Energy Performance Certificates are a standardised and widely understood way of monitoring the energy efficiency of homes.

⁴⁸ LETI, originally the 'London Energy Transformation Initiative' is a voluntary network of built environment professionals, whose agenda of achieving a zero carbon future is realised by developing clarity and actions for meeting the UK climate change targets.

mix of public landlord borrowing and public grant funding⁴⁹ for those in highest need, with homeowner mortgage extensions and low interest loans possible for the private sector. Halving the heat demand for the whole stock would create an infrastructure saving for National Grid, which LETI suggest could be harvested to fund retrofit works.

The challenges abound. A completed installation will be required every minute for London's social housing to be retrofitted by 2030, and for all its stock to be retrofitted by 2050 — necessitating a workforce in the tens of thousands. 15 per cent of London is in a conservation area⁵⁰, and London's planning authorities (already under huge pressure) are not yet resourced or skilled to assess the merits of external wall insulation, new windows⁵¹ and PVs/heat pumps⁵¹. Homeowners still just see hassle and cost in retrofit, and are rightly concerned about quality assurance from the supply chain. Local authorities and other local agencies will need to play a strong leadership role to persuade the early adopters and the next cohort to get works done. Once a clear and certified supply chain exists (preferably in a one-stop shop format), others should follow. Pilot retrofit projects are taking place all over London, which is a sensible and necessary step to start off large-scale programmes. However, many of these have used a very high specification (costing between £40,000

and £100,000) which will doubtless be pared back when the stock is tackled en masse. At Becontree estate, with two thirds of the houses now out of council hands, Be First has prepared a design guide for retrofit for the key three house types. The guide was prepared in consultation with residents to ensure it prioritised their concerns, such as losing area. Various levels of retrofit have been shown as packages, to suit income levels and comfort priorities. Heat pumps can be added later — the key is to get the heat demand down first.

Many social landlords are also now investigating retrofit and infill strategies on their post-war estates, as an alternative to demolition. The obvious challenge here is viability, but some are finding that they can introduce enough infill homes to make the strategy worthwhile. A pattern is emerging of tower retention⁵² to retain density, with lower rise infill creating a more legible urban realm around them. An example of this is James Riley Point at the Carpenters Estate in Newham,⁵³ where the towers will also play host to community and leisure facilities at ground and first floor. However, councils cited the need for the GLA to be even more emphatic about the need to consider building retention,⁵³ and make evidencing demolition more stringent. This would then incentivise the creation of coordinated project teams (chiefly architect, engineer and

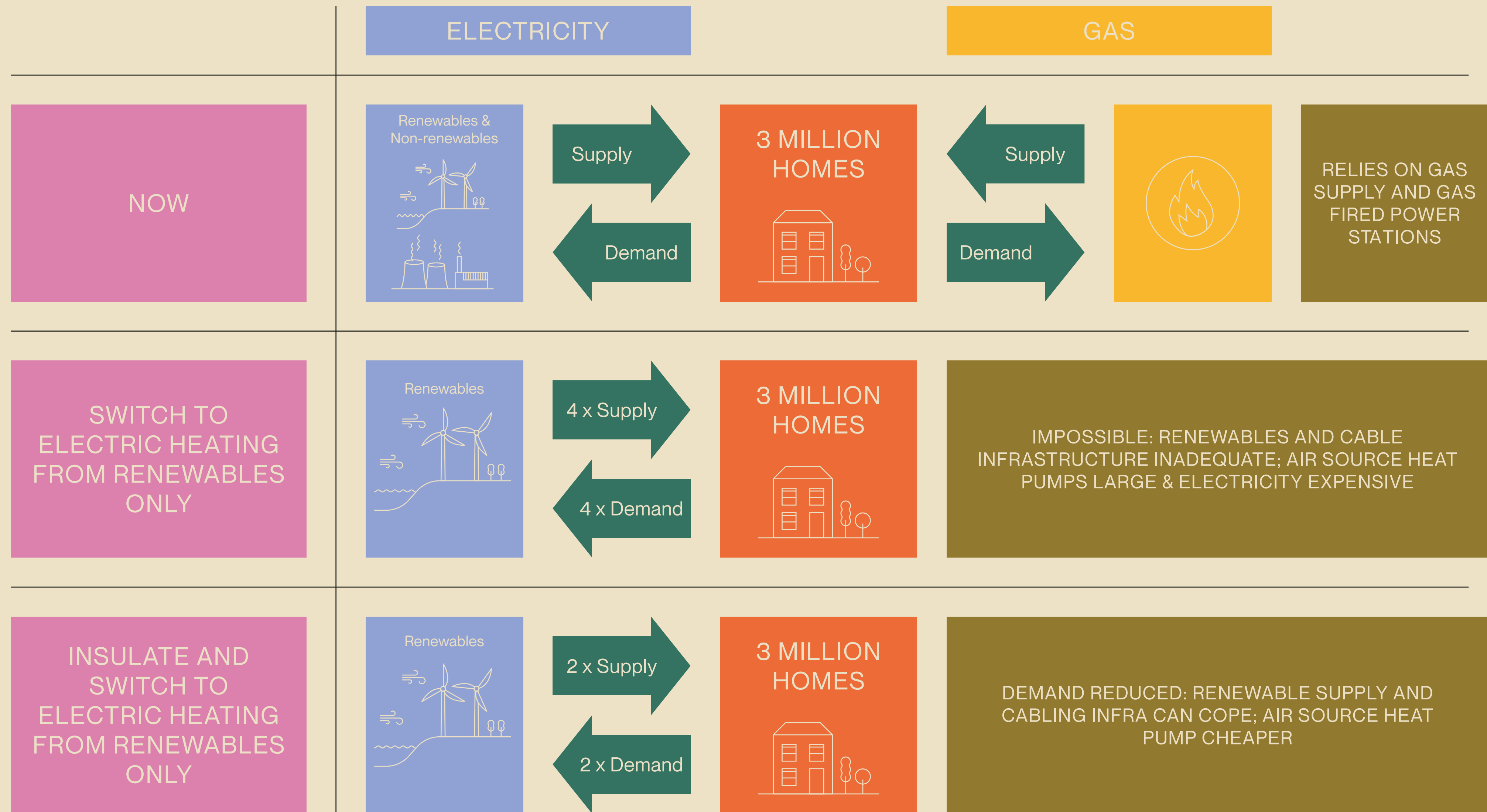
49 Public funding has been limited to pilots and there is no clarity on future funding streams

50 One product which the conservationists may favour is this very thin, high performance insulated glass: fineoglass.eu/

51 Having said that, RBKC has taken the pioneering step of issuing a 'planning order' giving consent to putting PV on almost all Grade 2 and 2* buildings without the need for Listed Building Consent.

52 Some Large Panel System towers may be unviable to retain – advice about the complexity of retaining these varies

53 The GLA's recent Planning Guidance on Whole Life Carbon Assessments is here



“One of the earliest discoveries we made from engaging with residents was the overwhelming demand for a centralised and reliable ‘single source of truth’ regarding retrofitting. This demand stems from the daily pressures of rising living costs and better understanding of the climate emergency. Residents expressed a strong need for councils providing comprehensive details on retrofitting, including accessible information about grants and step-by-step instructions on how residents can take action.”

Amandeep Singh Kalra, Associate Director, Be First



200 Becontree Avenue is a development in the LB Barking and Dagenham by Archio and Be First of two large suburban villas containing 19 affordable homes and community facilities in the Becontree Estate. Completed in 2022.

cost consultant⁵⁴) to emerge as experts in post-war estate analysis. The brief to these consultant teams would be to look at ‘public value’ (e.g. carbon emissions, community disruption) as well as ‘monetary value’, and to weigh these criteria in the round. Council asset officers also need to be trained in the same principles so they can make informed decisions on the options alongside residents.

Adaptive re-use

Changing working patterns accelerated by the pandemic have inevitably led authorities and businesses to consider whether more offices are now ripe to convert to residential. Following a spate of egregious conversions (due to careless PD rights being granted a few years ago), the rules have both tightened and expanded. Councils cannot apply blanket directions to prevent conversion,⁵⁵ but prior notice must be given and the Nationally Described Space Standards must be met. 31 million sqft of office space were apparently empty in London in August 2022^{bi} (a much higher figure than in previous years) but there are barriers to conversion. These include obvious physical and technical constraints, but also the reality that office buildings empty out gradually — not in neat ‘building-shaped’ tranches. So it may take some time before we see mass conversions. 55 Broadway (TfL)^{bj} and BBC Television Centre^{bk} are pre-pandemic examples of office buildings being converted by their institutional owners

into different types of accommodation, retaining a mixed-use component. The nostalgia for the heady days of those institutions and the tinge of sadness at the commercial need to divest of these icons is understandable. London Borough of Newham (via Populo) and London Borough of Waltham Forest have used the opportunity presented by their equally iconic council offices at East Ham Annexe and Fellowship Square to create new places and homes on their land.

Populo’s work at East Ham^{bl} also involves building rooftop homes, a strategy that is not without challenge⁵⁶, especially above existing homes. Sutton Housing Society has taken on the challenge and completed over 70 new homes, with a further 80 in the pipeline.^{bm} Skyroom,^{bn} who estimate that over half a million new homes could be provided this way, is looking to upscale this model, and have a number of schemes in London ready to start on site.

Low carbon/waste homes (in operation)

Whilst the general decarbonisation of the grid is a subject beyond this report, local green energy supplies are emerging in connection with London’s public and private assets, including housing. Repowering London^{bo} is putting solar PV on housing and community buildings around London, funded through citizen shares (garnering a 3 per cent return) and some grant funding. Other initiatives

“We’re seeing a growing interest in green energy in our communities. It’s not just cost savings that residents are interested in, but also the environmental benefits that things like solar panels can bring.”

John Lewis, Executive Director, Peabody

⁵⁴ Councils really want these teams as a package (though not necessarily from a multi-disciplinary consultant), so that they know the advice and options are fully coordinated from all angles.

⁵⁵ An exception is the City of London where offices must get planning consent to convert to resi <https://news.cityoflondon.gov.uk/city-of-london-offices-protected-from-automatic-residential-conversion/>

⁵⁶ Technical, planning, regulatory and resident perception issues make rooftop developments a specialist activity, requiring clear and bold leadership from the landowner.



James Riley Point (JRP) is a scheme in the LB Newham by Proctor & Matthews Architects, ECD Architects and Populo Living that reinvents a 23-storey vacant residential tower. Completion in 2025. © Proctor and Matthews Architects / ECD Architects



Agar Grove by Hawkins/Brown, Mae Architects and the LB Camden is a 493-home estate regeneration scheme where 80% of the homes will be built to a Passivhaus standard, the largest development of its kind in the UK. Completion in 2025. © Forbes Massie

include heat networks which use waste heat from data centres or London's underground system⁵⁷.

The Future Homes Standard will set London's new build homes on a clear track to net zero carbon in 2025, with the decarbonisation of the grid required to fully meet the target over time.⁵⁸ The more exacting Passivhaus standard^{bp} has been taken up on a small scale by some London councils (notably the London Borough of Camden, London Borough of Ealing and London Borough of Newham), but the higher cost of achieving it has deterred both the public and private sector from scaling up their Passivhaus delivery. Agar Grove in Camden^{bq} has been the largest recent example in London, and proves that new skills are needed to roll it out at scale⁵⁹. Uplifted costs of Passivhaus would decrease if the standard were to be mandated and a training scheme funded — skills are another key barrier to uptake. It is notable that the EU has mandated the NZEB standard,^{br} which has a fully funded large scale upskilling programme associated with it. Low energy demand and low carbon supply are fine as far as they go, but the ability to store and use energy later also helps to maximise the use of renewables and to lower peak demand, helping renewable sources of energy to be viable. Products such as those by myenergi^{bs} and powervault^{bt} allow electricity generated from solar panels to be stored in a home battery and e.g.

used to charge a car overnight.

Waste in operation is a further aspect of how new homes impact the wider environment. Hackney Wick and Fish Island Community Development Trust is pioneering a circular economy hub^{bu} for this neighbourhood, which has seen intensive new development in the past ten years. The hub will act as a repurposing centre and provide composting facilities, also reducing heavy traffic through the area.

Embodied carbon/circularity

As the grid decarbonises,⁶⁰ it is embodied carbon which is becoming the most important nut to crack in the race to zero carbon.⁶¹ A lack of regulation on embodied carbon is disincentivising innovation, exacerbated by the GLA's recent policy⁶² banning combustible materials (which include timber) in all external walls at any height.^{bv} This moratorium on the use of timber puts the UK well behind its European and US counterparts in this area.⁶³ Hawkins\Brown has developed its HBERT software to carry out life-cycle carbon analysis (LCA), but they believe that many designers are not yet well-versed in using LCA as a design tool. Waugh Thistleton Architects is developing a six-storey timber-built housing system which aims to be

“There’s still not enough people who can do whole life carbon analysis in a design-led way; people who are able to say: this is the amount of carbon, these are the things I would recommend, to reduce the overall emissions.”

Louisa Bowles, Partner - Sustainability Lead, Hawkins\Brown

⁵⁷ Data centres; Underground. Government is also looking to encourage further heat networks of this kind through the Energy Security Bill, in a section called Heat Network Zoning.

⁵⁸ The Mayor of London will only fund housing schemes which meet net zero carbon, though an offsetting payment is permitted.

⁵⁹ 'It has been a very steep learning curve for us and I think it's fair to say that we've had to go back to basics in some areas to learn how to build to these sorts of standards.' Paul Ansell, Hill

⁶⁰ Though there are many variables in this, the embodied carbon used to build housing currently amounts to roughly 20 years of operation. This number will increase as the grid decarbonises.

⁶¹ It is notable that LETI's excellent Embodied Carbon Primer from 2020 contains no residential exemplars. Commercial building tenants and designers are streets ahead in their thinking about embodied carbon.

⁶² For the housing which it funds

⁶³ Some overseas observers note that London has never quite shaken off the memory of the Great Fire of London, where timber construction led to mass property destruction.

pre-approved for warranties and insurance, including a full material and construction specification. And even then, many local authority and other approved inspectors (as well as warranty providers) are still struggling to sign off timber systems which are acceptable in Sweden and the US: they are not insured to do this in the UK. Circularity (the ability to use all building components again were a building to be disassembled) is now gaining traction and value in commercial buildings. Long-term residential investors may also begin to see the benefit of holding a 'material bank' of doors, windows and heat pumps, recyclable anywhere in the world. At their Merton Regeneration scheme, Clarion^{bw} took inspiration from Queen Elizabeth Olympic Park's careful re-use of building components to set recovery and waste minimisation standards for their construction team.



Merton Regeneration - Ravensbury by HTA Design in the LB Merton is one of three estates that Clarion are regenerating within the Merton Regeneration Project, located alongside the Wandle the masterplan reconnects the estate to its parkland setting. Completion in 2025.

Local Benefit

What are we aiming for?

- London citizens buying into the principle of new homes in London, and local neighbourhoods meaningfully benefiting from their delivery

How are we doing?

- Some centres of excellence but still a lack of trust and transparency in local engagement
- A far greater emphasis on local benefit arising from the development process, but more to do

Overview

Trust in the development sector — including councils, developers, architects and agents — is hard to win, especially in today's environment where all institutions are viewed with increasing suspicion. Recent local elections outside London highlighted how housing is a pivotal electoral issue both on the NIMBY and YIMBY sides. When anticipating new homes in their area, communities should have a right to expect full engagement, local economic

betterment and high quality, low impact construction as the trade-offs.⁶⁴ As Related Argent says — ‘the journey is as important as the destination’.

Citizen participation

Why is London growing? How many homes do we need and why? What kind of homes should they be? These questions demand a strategic level of citizen engagement which still feels missing in the capital. London's generational and tenure-based divide is probably at its widest right now, with power, skills and time dominated by London's owner occupiers (a third of whom are retired). The Mayor is considering a citizen assembly to level up that power structure, something which can't come too soon.⁶⁵ Newcastle has recently opened an urban room^{bx} (following Sir Terry Farrell's model from 2014) which allows citizens to see the development of the city in the round. The London Centre, home to NLA, serves a similar role for London, but are more local centres needed in neighbourhoods where change is extensive?⁶⁶ Neighbourhood Planning provides another avenue for community aspirations to be expressed, but some claim that this process is time-heavy

“We've done a lot of work trying to upskill the communities we are working with so that they are able to talk about development and be active in the conversation. For example we have done workshops with residents where we try to explain planning to them, things like how to comment on a planning application which seems very basic, but actually the system can be so impenetrable for the average person”

Lizzie Le Mare, Director, Tibbalds

⁶⁴ Planning is supposed to mediate that social contract between citizen and developer, but applications are now so complex that no-one – not even planners - can see the wood for the trees.

⁶⁵ Great care is needed in ensuring that these assemblies are not just talking shops and that they actually have influence and credibility.

⁶⁶ Short term 'urban rooms' appeared at Old Kent Road, Kingston and Croydon, but did not seem to endure.

and hence undemocratic. At a project level, innovation can be found at all scales. London CLT takes the unusual step of getting local communities to choose the architectural team (at an open event) from a pre-selected group. Great care is then taken in both brief-making ('what do we need in this place?') as well as co-design to ensure that the scheme works for both new residents and the wider neighbourhood⁶⁷. Nationwide Building Society (and their partner, igloo) is on site with a scheme in Swindon which received zero planning objections. In part, this was due to their Community Organiser⁶⁸ who undertook hundreds of listening exercises long before a line had been drawn.

At the other end of the spectrum, digital platforms now enable easy mass feedback, sometimes providing the counterfactual to orthodox planning or councillor opinion. Commonplace^{by} (a digital engagement provider) observes that young people in particular are far better represented in digital engagement, and more likely to have a positive view. Questions can more easily draw out trade-offs, e.g. height vs green space. Planners and councillors can have their expectations overturned: digital feedback on one recent project proved that car-free streets (and a parking barn) would be very popular on a new housing development. Artificial Intelligence (AI) is at a formative stage in design and development, but must have huge potential in engaging citizens. Could it provide an interesting and transparent platform for the complex trade-

off conversations which surround estate regeneration for instance? If key parameters such as community disruption, viability, heritage, affordable homes and carbon intensity were set at the outset, trade-offs could then be played out in built form in real time.

Socio-economic benefit

Local communities often perceive that there's 'nothing in it for them' when a new development emerges in their local area. The large scale, long-term developer/operators have the best chance of overturning that narrative, by establishing a wide-ranging place vision alongside local communities and tenaciously holding on to that. Essentially, the first 'quality of life' criterion above has to extend to all local citizens, not just the lucky new build recipients. At Thamesmead, Peabody worked to gain trust with the existing community through making a visible difference to the existing public realm on both a day-to-day and longer-term level. They have created a long term plan^{bz} which prioritises working with residents and purposefully put new housing as only one of many ambitions. It committed funding to value creation initiatives such as green infrastructure, a cultural programme and jobs/training programmes, and it is measuring its impact on local life-chances and perceptions (with Arup) in a five-year longitudinal study. At Carpenter's Estate, the meanwhile programme is seen as a discrete project with

“We do quite a lot of ‘natural language processing’ ... and on brownfield sites, we noticed a real softening towards building height [in the last five years]. But — and a very big but - they want green space in exchange.”

Benjy Meyer,
Chief Product & Technology
Officer, Company Director

⁶⁷ It's a bit easier for a sub-market housing developer doing lower rise buildings to garner support of course, but there's still a lot to learn from their methods.

⁶⁸ One of the mantras of community organising is 'listening'. A good way of changing mindset is to catch yourself saying 'speak to' or 'engage with' a group of people and convert it to 'listen to'.

“Our plan for Thamesmead clearly sets out our ‘whole place approach’ to the long-term regeneration of Thamesmead. This starts with us ensuring that the town is well managed and cared for. Only then can we meaningfully engage communities to co-create new opportunities and neighbourhood improvements.”

John Lewis, Executive Director,
Peabody



Carpenters Estate by Proctor and Matthews Architects and Metropolitan Workshop with the LB Newham is a £1billion resident-led plan to restore and transform the Carpenters Estate into a vibrant neighbourhood in the heart of Stratford. It delivers over 2000 high-quality homes (50% genuinely affordable). Completion in 2033.

its own budget and timeline, including plans for movable play, market stalls and affordable workspace as well as the project's engagement hub. Careful consideration is being given to 'community wealth building',^{ca} ensuring that existing enterprises (bakery, artists) are retained on site, with meanwhile locations found in refurbished existing buildings. Hadley Homes has created the Lighthouse and Gardens at their Stratford site, offering wellbeing classes and food growing as well as hireable spaces. The House for Artists by Be First^{cb} set out to provide more security for the art community, whilst also asking them to give back time and skills to the community where they operate. There are shared workspaces and an exhibition space at ground floor, and a condition of the lower rental prices is that residents undertake community-based visual arts work for half a day a fortnight.⁶⁹ Be First say that co-commissioning this project alongside arts experts such as Grayson Perry and Create (the operator) was the key to its success.

Communication about local benefit needs to be honest and clear. The hoardings seen around London sites are beginning to tell more of the socio-economic story associated with a site or regeneration project, but none surpass the Parisian habit of explaining the project finances and benefits in detail on the hoarding. Section 106 and Community Infrastructure Levy (CIL) give capital back into neighbourhood improvements (to the tune of

c. £0.8bn⁷⁰ in 2018/9^{cc}), but the nature of that investment is not currently very obvious to citizens. A standard dashboard (of which more at the end) would be a useful way for people to see the community offer from a scheme, amongst other parameters.

Construction quality/impact

London citizens have reason to be wary about construction quality. The Grenfell tragedy and the more recent building failure in Camden^{cd} are not typical incidents in London, but the wider cladding scandal points to a crisis of regulation and inspection in building⁷¹. Regulations, there to protect citizens from the worst cases of building failure, are currently confused and impacting substantially on delivery in London. Not only do the revised regulations have to settle as discussed, citizens also need to understand them, including their rights and responsibilities for the buildings they live in. And they need to be confident that the inspection system — surely best hosted by their local authority — is resourced to police the regulations. Some say that there are currently not enough skilled or insurable people either to approve or monitor build quality, or non-standard techniques for meeting fire and sustainability regulations. This is leading to 'zero tolerance' policy-making such as 'no timber' or 'no objects in common parts', harming both the environment and the quality of life for citizens.

“We established a Growth Commission to really do an in-depth piece of work around what good growth meant to our residents. We had six independent commissioners — lots of one to one and group conversations with developers, residents and community groups. It is about making sure local residents benefit from development going on.”

Sharon Strutt, Head of Regeneration, LB Redbridge

⁶⁹ recalls the Victorian Toynbee community where graduate housing was provided at a low rent on condition that residents actively helped the older residents living there.

⁷⁰ Not including affordable housing

⁷¹ There is undoubtedly a cultural issue to tackle as well, within the whole construction supply chain.

Off-site manufacture can address some of these concerns,⁷² and also reduce construction impact on local communities through reduced vehicle movements and time on site. Construction Management Plans can be powerful tools as well, not just planning tick-boxes. Tower Hamlets has produced a Code of Construction Practice^{ce} which sets out clearly how construction work can be coordinated across the borough to have least impact on citizens.



A House For Artists is an ambitious model for affordable and sustainable housing for creatives by APPARATA and Be First in the LB Barking and Dagenham. Completed in 2021 © Ståle Eriksen

⁷² Some major developers are speaking to off-site manufacturers now, as they are finding it hard to guarantee a 'golden thread' of on-site quality and safety compliance. They are also struggling to find labour.

Recommendations

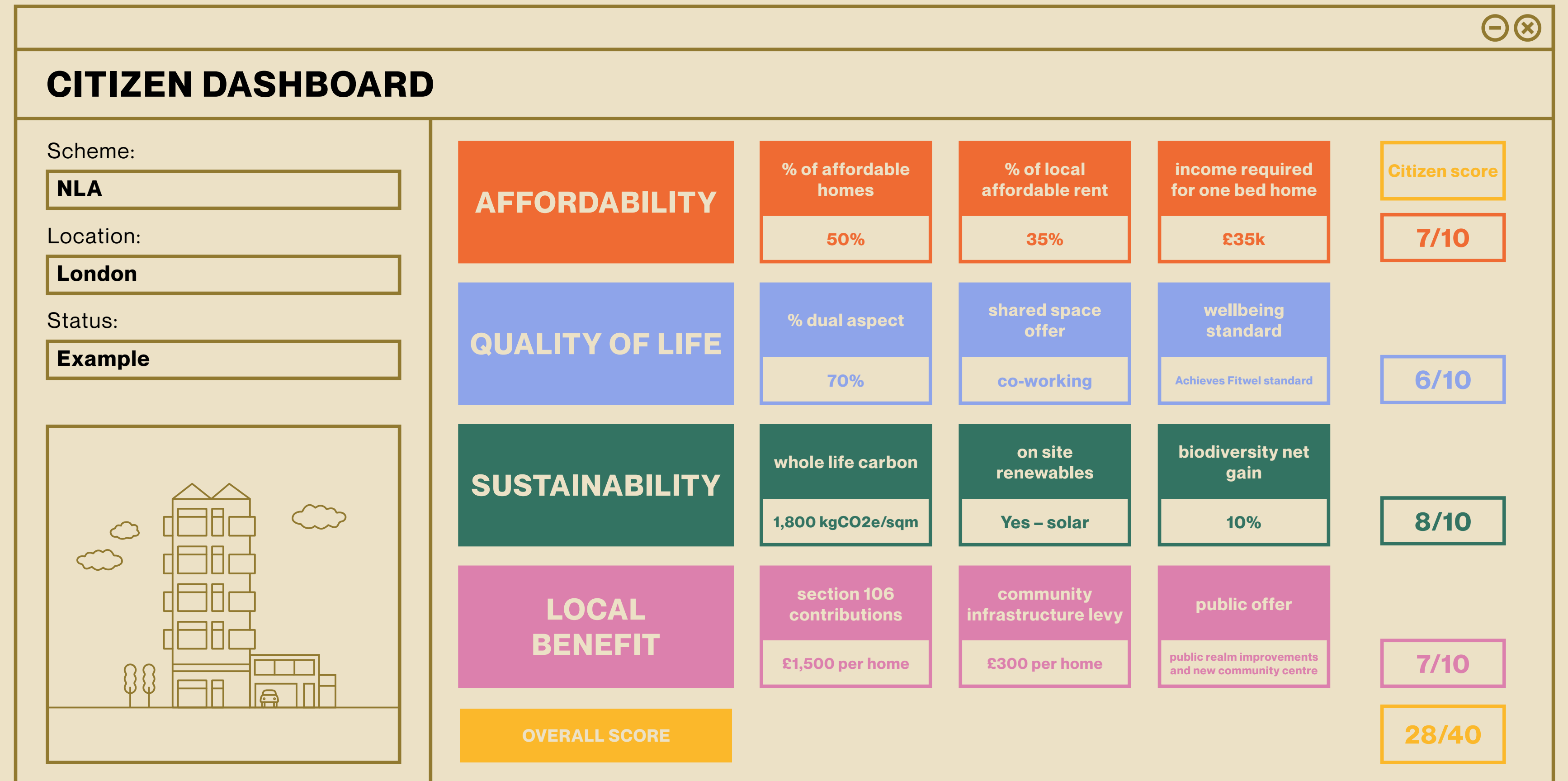
These recommendations display the agency of built environment actors in relation to the four key themes of affordability, quality of life, sustainability and local benefit. Collectively, the built environment sector has the opportunity to enact positive change on London's housing.

		GOVERNMENT	MAYOR	COUNCILS	DESIGNERS/ ENGINEERS	CONTRACTORS/ DEVELOPERS	INVESTORS
AFFORDABILITY	Clear rules on the valuation of public land to enable public benefit	✓					
	A rethink of Housing Benefit towards a capital investment	✓					
	An easy-to-invest public grant and patient capital vehicle		✓				✓
QUALITY OF LIFE	Planning guidance or policy on shared amenities for larger developments		✓	✓	✓		
	Clear planning regime for older people's housing and Temporary Accommodation	✓		✓	✓		
	Enhanced rights and training for leaseholders	✓					
SUSTAINABILITY	Regulation on whole life embodied carbon	✓			✓		
	Regulation and warranties for mass timber in housing	✓	✓				
	Funded skills, training and certification for housing retrofit	✓		✓	✓	✓	
LOCAL BENEFIT	A citizen assembly to guide London policy on housing		✓				
	A citizen dashboard to enable easy judgment of planning applications		✓	✓			
	Clearer statements of Local Benefit on hoardings					✓	
ALL	Research on tower block living to inform future policy		✓		✓		
	Methodology for assessing retrofit/demolition options		✓	✓	✓	✓	
	A more interventionist role for GLA/LAs in land assembly and enabling	✓	✓	✓			

Citizen Dashboard

Picking up on the challenges described in the report, here we suggest that alongside planning applications, a simple 'citizen dashboard' were also available for any given scheme. Here is an example of what this tool may look like using the four themes described in this study and using a point-based system for a fictional scheme:

It would allow the wide range of communities in London to see — in a quick snapshot — what any given development was delivering from a citizen viewpoint. It would enable easier challenge to developers, architects and planners to ensure that development really works for all Londoners.



Post Script: Towers

Towers provide an interesting test case for all the four citizen lenses.⁷³ Land economics is likely to keep driving more tall buildings in London, so some reflection is surely warranted on how tall buildings can better accommodate citizen needs. The following very short summary is inadequate to analyse the efficacy of towers; an in-depth study should be funded by the Mayor to inform what will become our generation's built legacy. Specifically targeted AI may well prove useful in weighing up all of the criteria, allowing designers and planners to trade them off in a more intelligent way than is possible now.

Since 2014 NLA has produced its annual London Tall Buildings Survey, a publication which provides the latest data and analysis on how tall buildings contribute to a denser, more compact and sustainable London. The 2024 edition will mark 10 years since the launch of the report and will look back at the past decade of high-rise buildings in London and will assess the contribution of towers to the social, economic and environmental evolution of London.

The data is somewhat unclear, but around 80,000 homes in buildings over 20 storeys are 'in the London pipeline' and 35 tall schemes were completed last year.^{cf} This may

represent one in seven new homes delivered.

Affordability

A 2023 multi-authored report^{cg} (published by a number of veteran housing specialists) puts the case that taller buildings are more expensive to build,⁷⁴ may prove more expensive to run, and risk being abandoned by their landlords and residents over time. High buildings mean high service charges requiring high incomes — so this format is unlikely to suit the majority of Londoners from an affordability perspective.

Quality of Life

In the same report, Kath Scanlon examines whether taller buildings provide appropriate homes for families.^{ch} The findings generally suggest that family life is constrained by higher rise living, but conclusions are hampered by the lack of high quality research on this matter.⁷⁵ Toronto has created an excellent new set of standards specifically for higher rise homes,⁷⁶ acknowledging the presence of children in particular. 60 per cent of London households

⁷³ The NLA's 10th edition Tall Buildings Survey is due in 2024 and will continue this conversation.

⁷⁴ Recent second stair regulations will exacerbate this, making the net to gross worse.

⁷⁵ The survey in the NLA's 2021 Tall Buildings report is a good start but academic rigour and more focus on tenure, income, costs and choice is needed in addition.

⁷⁶ 'Growing Up' – now enshrined in their planning policy

comprise lone dwellers or couples in London, but older people — who form a major part of this group — do not yet have a cultural propensity to downsize to a tall building

Sustainability

Some argue that taller buildings, with their concentration of homes on small plots of land near transport nodes, are more sustainable overall than sprawl. However, they present a major challenge in terms of embodied carbon per square metre, due to the amount of material required just to go high, and the nature of those materials. And even if timber could be used, there is a limit on the height which it can achieve. Cooling is often needed at higher levels, though heating demand can easily be minimised.

Local benefit

Local citizens will rightly ask of a taller development: who are these homes for, and how do we benefit? Taller buildings are often required (in planning) to generate useful local amenity at ground and first floor level, and to fund public realm improvements. But local people can find it hard to welcome them due to the visual and environmental impact which tall buildings have, especially in suburban areas.



Keybridge Estate in Vauxhall, LB Lambeth, a residential tower / Keybridge Estate by Allies and Morrison for Mount Anvil, BT Property, completion year: 2022. © Allies and Morrison

Viewpoints

Housing for all: Design innovation for sustainable, progressive homes

Kathryn Tombling,
Principal and Head of Housing at BDP

London's Housing Challenge: Innovation in Delivery and Design

Selasi Setufe,
Senior Architect, Be First

Modular Construction

Gary McLuskey,
Managing Director –
Global Design, Greystar

Reform to perform: Taking on the housing challenge through innovation

Carl Vann,
Partner, Pollard Thomas Edwards

Housing for all: Design innovation for sustainable, progressive homes

Design has a crucial role to play in combatting the housing crisis, reducing housing inequality and the climate emergency. It's time for us to stop regurgitating figures and start bringing disruptive innovation to the housing sector.

By bringing together collective skills, expertise, and resources across our industry, we can deliver an attractive, equitable and sustainable urban model for future cities. We are studying the potential and we believe that by working within existing transit and planning frameworks, we can create complete communities in an environmentally and socially sustainable way that enhances quality of life. Vibrant mixed-use communities help to tackle many of the challenges society faces and create places people want to call home. They also create jobs and places to come together as a community, enhancing a sense of civic pride and belonging.

We should be looking at development sites holistically, understand how to unlock land and the potential adaptive re-use of existing housing stock, create community spaces and increase biodiversity. At Tollgate Gardens in

*By Kathryn Tombling,
Principal and Head of Housing at
BDP*

Maida Vale, for example, the urban design plan shaped the residential terraces to activate street activities to one side, and south facing communal gardens to the other. The existing ground levels were used to accommodate car parking with the garden forming an oversailing green plateau above. The plan and the design, within an existing site, achieved carbon and resource reductions and created much needed gardens for the community, whilst enhancing space for nature.

Innovative solutions can be replicated in multiple locations to speed up the delivery of much-needed housing. As an example, our Gap House concept, which proposes affordable, eco-homes on disused garage plots and has the potential to revitalise neighbourhoods and provide more homes up and down the country. We need to strive to create a regenerative and circular economy; we need to reuse, adapt, and decarbonise to ensure our homes and neighbourhoods are future-fit and support happy, healthy communities that thrive.

New energy strategies will be crucial in the future of

housing in London. We should continue to explore the use of innovative technology such as air source and ground source heat pumps and deliver community and district heating through well-designed energy networks such as the one we are currently building at Plumstead, West Thamesmead.

At a global level, this innovation in energy generation is already happening. At North America's largest mixed-use development — The Well in Toronto — a below ground cistern connects to an Enwave Deep Lake Water Cooling (DLWC) system and a newly built hot water loop provides heating and cooling to the 11,000 people who will live and work there. It has a two-million-gallon capacity, measures a staggering 50ft in diameter and extends 260ft below ground level. This is quite literally a world first and will serve as the hub of future expansion as the city grows.

By investing in new ideas, we connect people, history and nature with developments and support the financial, environmental, and social values of developers, housing associations and local authorities as well as the communities we design for. In our experience, we know that strong, collaborative innovation can help blend housing typologies, increase quality and break down hierarchies. And that is something we can all believe in.



The Well in Toronto

London's Housing Challenge: Innovation in Delivery and Design

*By Selasi Setufe,
Senior Architect at Be First*

Through observation and comparison of the various models implemented across London, there are some notable ingredients contributing to positive and successful innovations in the delivery of affordable and sustainable housing.

Clear Vision, Leadership and Structure

The notion of affordability and sustainability in housing often seems like a dichotomy, as sustainable development is yet to prove affordable by the typical measure of capital cost and viability. Facilitating innovation in both design and delivery of these homes therefore requires a rethinking of value and taking a long view on how the viability conundrum is resolved. Implementing a clear vision, strong leadership and a well-considered organisational structure can create fertile ground for innovation to take place. The London Borough of Barking and Dagenham (LBBB) is an example of this. Under strong leadership, the borough has taken a long view on the delivery of affordable homes. In the last 7 years, LBBB has established 5 wholly owned arm's length companies, 3 of which are directly linked to the delivery of affordable and sustainable homes.

- 1 Be First is a council-owned regeneration company, operating with the flexibility of the private sector but the ethos of the public sector. With an aim to help deliver 50,000 new homes over the next 20 years, its purpose is to accelerate the pace and scale of regeneration in the borough
- 2 Reside is a council-owned municipal housing company. Homes developed by Be First are made available through Reside, providing genuinely affordable homes to local people. Reside prioritises renting to people who are in employment but can't afford to buy or rent privately and have limited access to social housing. Properties are let at 65% to 80% of the market rate.
- 3 B&D Energy is a council-owned green energy company, established to offer sustainable heat and power to new housing developments within the borough and surrounding areas.



200 Becontree © FRENCH+TYE



House for Artists © Ståle Eriksen

Collaboration

Socially grounded and equitable cross sector collaboration between the private and public sector can help provide solutions to key challenges in delivering homes that are both affordable and sustainable. For collaborative innovation to be successful, the sectors involved must be aligned in their vision. The private and public sectors each have invaluable insights and experience and bringing these together under a unified vision creates opportunity for innovation.

Working with communities

Working with communities to better understand their needs can be utilised as a powerful tool to inform design from an end user perspective. Where sustainability is concerned, working with communities to ensure new design features requiring adapted ways of living is necessary to ensure features such as heating, cooling, shading and ventilation systems work as intended.

Diversity in Design and Delivery

London is a diverse and multifaceted city, and the needs of its population are equally diverse. Innovation in the design and delivery of affordable and sustainable homes for Londoners should therefore draw on the diversity of the city's population through collaboration with different cultures, races, genders, ages, classes etc.

London benefits from development opportunities that range in scale from the micro to the macro, with countless backland garages sites and infill sites to large scale regeneration sites and acres of underutilised industrial land across the city. Opportunities for innovation should be explored at all scales to help ensure rich and quality solutions that reflect the landscape of London as well as the varying scales of private, public and community organisations.

In the handful of examples where diversity has been a key feature of design and delivery, there have been successful innovations that demonstrate the need to embed to diversity more widely.

Opportunity in chaos

The best innovations provide solutions to complex problems. Having to navigate through factors such as low land values, economic and environmental crisis, deprivation, and many other issues forces us to think and do things differently. This chaos and crisis provides opportunity to push beyond the status quo and traditional practices to find innovative ways to deliver the good quality affordable and sustainable homes that Londoners need.

Modular Construction

*By Gary McLuskey,
Managing Director – Global Design,
Greystar*

We have 30 years of experience of investing, developing, and operating a range of residential rental products across the globe including student, young professional and traditional multifamily housing. We were an early adopter of volumetric modular construction in the UK and have since exported the technology to the US setting up our own modular housing factory in Pennsylvania with a focus on delivering affordability at scale, while improving quality, sustainability, and the speed of delivery.

Modern methods of construction will be part of the answer to the UK's housing crisis, with volumetric construction being up to 60 per cent quicker than traditional construction. We focus on three key areas — design, approvals, and construction — to improve the speed and quality of the much-needed rental homes we deliver.

We design successful communities by focusing on resident experience. At times, the desire of residents does not fully align with policy convention, so we work hard with local authorities to navigate design and planning policy that has generally evolved to guide 'for sale' and/or social housing. We negotiated several policy points with the GLA when designing Greenford Quay by referencing historic precedent

and our extensive resident feedback research.

A good example of this is rather than following guidance that would have led to multiple entrances, we always focus on the arrival at the building in a larger primary entrance. This allows our residents to gain valuable facetime with their onsite community team in addition to improving security.

In the UK, to accelerate the speed of homes to market, we have partnered with Tide Construction and Vision Modular Systems to utilise modular construction on a number of student and multifamily projects with almost 2,500 homes already in operation. We work with emerging technologies to deliver sustainable solutions, better design, and reduce delivery times by 50 per cent.

Greenford Quay, our multifamily community in Ealing, is one of the UK's largest build-to-rent schemes and will comprise 2,118 homes (30 per cent of which are affordable) when it is finished. In total, over 60 per cent of those homes will be delivered utilising volumetric modular construction. The development also includes 20,000sqm of retail and office space as well as a primary school, health centre and 3.1 hectares of outdoor public spaces. The construction

duration for our first building at Tillerman's Court was 21 months, significantly faster than it would have taken using traditional methods.

At our core, we create good urban architecture and consider modular construction a technique and not an aesthetic. Our modules at Greenford are delivered to site and then clad in brick on site to avoid any obvious module joints — just because its modular does not mean the architecture needs looks different or it needs to alter resident experience.

As well as speeding up the process, modular construction also allows for earlier cost certainty, design consistency and higher levels of safety and quality control. With less time spent on site, noise and disruption for our neighbours is kept to a minimum. As a vertically integrated business, this allows us to maintain a good relationship with neighbours of the site, as the business moves into the role of operator.



Construction site

Reform to perform: Taking on the housing challenge through innovation

Despite construction's stubborn resistance to change, innovation is central to our practice at Pollard Thomas Edwards. It's why we've developed a hub of in-house specialists — in sustainability, construction technology and social value — to support our project teams. It's also why we hold monthly 'Conference Days', inviting industry experts to join our citymaking debates on themes ranging from Third Age Living, Village People and PropTech, so that we all learn together.

Publish and take a stand

And it's why we publish our research: recent books on deck access housing (for Routledge) and estate regeneration (with Levitt Bernstein, HTA and PRP), for example, have sparked new takes on the future of communal living — more so in the light of COVID and Grenfell. Similarly, our Government-backed research into the readiness of industry to deliver zero carbon homes across the UK (Building for 2050) and our live project developing new climate change guidance on external shading for the Good Homes Alliance, play directly into our everyday practice. In essence, at PTE,

*By Carl Vann,
Partner, Pollard Thomas Edwards*

design and innovation are one and the same thing.

Design follows research

For example, at our Beechwood Village project in Essex, we used an 'online configurator' and factory-built, cross-laminated timber construction, to enable resident choice at scale. Once customers had picked their plots and one of five pre-set 'chassis', they then customised their plan layouts, external and internal finishes and were able to add features such as a bay window or 'room-in-the-roof'. We worked closely with sales and manufacturing teams to develop a process which could generate drawings to satisfy pre-commencement planning conditions and technical details which corresponded to the individual customer choices.

Reform now!

Nevertheless, innovation can only make a difference when politics catches up with sentiment. Currently, the regulatory agendas of taxation, building safety, climate change and design quality are not joined up. The result is a string of

unintended consequences that are stalling housing delivery. It is essential that legislation is untangled and streamlined. Three initiatives that can unpick these competing interests are:

- 1 Harmonising VAT rates on new build and retrofit projects
- 2 Enabling the safe use of timber in construction
- 3 Removing cost from the procurement process (returning it instead to the project budget)

The first point is obvious. As well as the widely-supported Architects' Journal Retrofirst campaign calling for it, so too is the cross-party group on Conservation, Places and People. The next Government must act fast on this. The second point is another easy win: If New York city council can approve the use of mass timber for buildings of up to 85 feet (25.9 metres) tall, so can we. If we don't, the government's embodied carbon targets will be out of reach. As for point three, most are witness to the waste created through disproportionate tender briefs, excessive participant lists, and discontinuous procurement.

If we can accept the context is always climate change — and what we can do to mitigate its worst effects — government guidance could embrace innovation, be simpler, joined-up and effective.



Beechwood Village © Nick Kane

Project Showcase

The following showcase provides a snapshot of recently completed and planned innovative projects in London that demonstrate scalable solutions to the Capital's housing challenge. Projects operate across a range of scales, typologies and tenures and highlight how industry leaders are working collectively to deliver the very best affordable and sustainable housing that prioritises quality of life and local benefit for Londoners.

Alongside projects the showcase also platforms innovative concepts that push the boundaries of housing typologies, affordability and methods of construction together with products and technical solutions that prioritise affordability and social value.

All projects featured in this showcase were submitted via a call for entries conducted by NLA in summer 2023.

Showcase projects map

[Central](#) →

[East](#) →

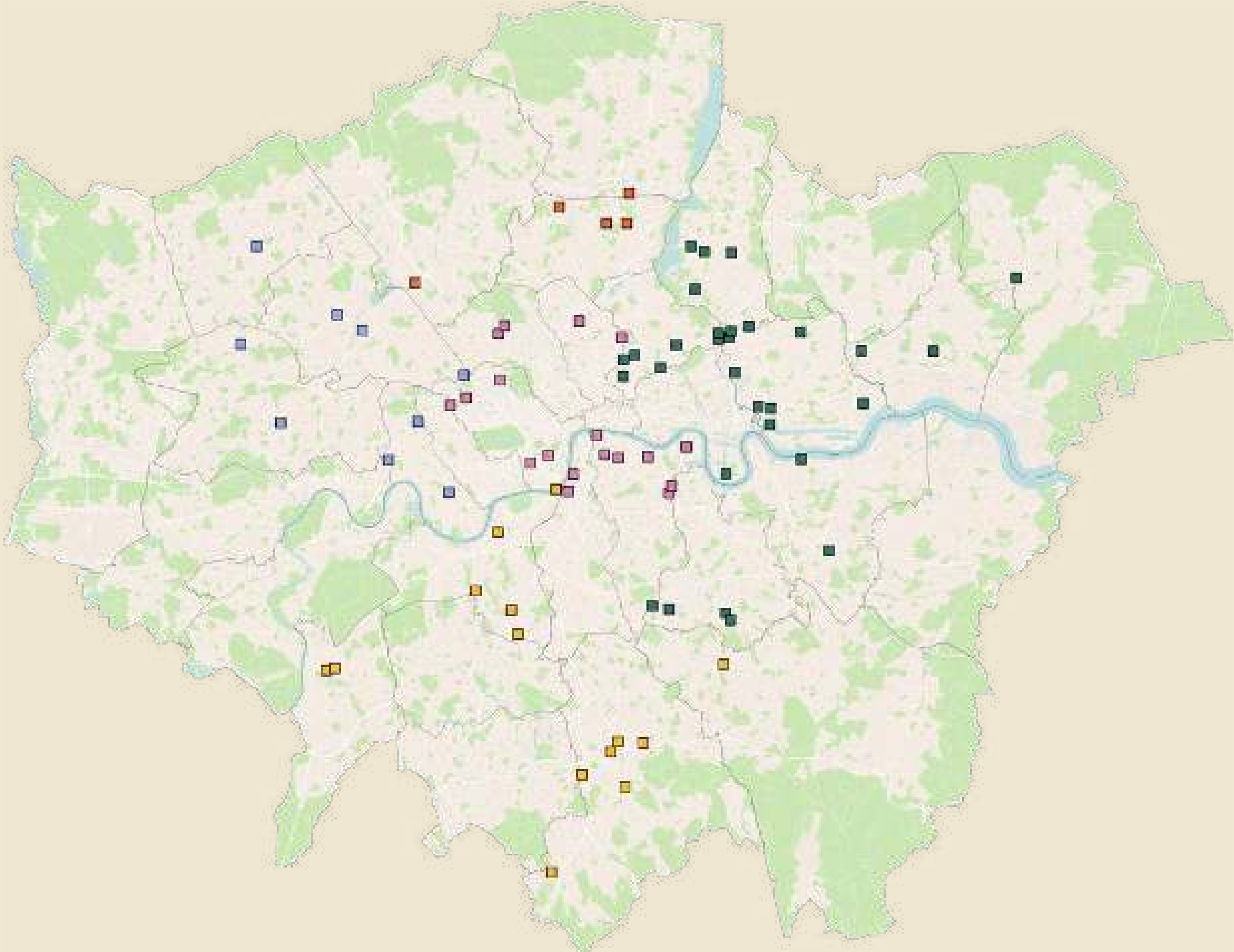
[North](#) →

[South](#) →

[West](#) →

[Products](#) →

[Concepts](#) →



216–220 Blackfriars Road

216-220 Blackfriars Road,
20 Blackfriars Rd, London
SE1 8NW Southwark

Status: **Planning Granted**
Completion: **2026**

Client: **Southwark Charities**
Architect:
Fathom Architects
M&E / Sustainability
Engineer:
Long and Partners
Planning Consultant: **Turley**
Landscape Consultant:
MRG Studio
Transport Consultant: **TTP**

Metrics:

Upfront Embodied Carbon
(A1–A5): 604 kgCO₂/sqm

Life Cycle Embodied
Carbon (all modules A–D):
2,557 kgCO₂/sqm

Energy Use Intensity
(heating, hot water,
electricity):

23.22 kWh/sqm/year
CO₂ Emissions Intensity:
5.4 kgCO₂/sqm/year

Urban Greening Factor: 0.37

The GLA predicts 2m over 60s will live in London by 2035, the capital's fastest growing demographic. The scheme has been designed to re-imagine the almshouse typology to provide modern affordable later living in a central London location. The 100 per cent affordable housing development in Blackfriars, comprises 62 contemporary almshouses for local elderly residents in need, alongside 30,000 sqm of flexible workspace (including affordable workspace), supported by community uses and public landscaped gardens.

The almshouse block challenges the traditional almshouse typology to allow for great density whilst maintaining quality of life and community. The block rises to 15 storeys, creating a vertical community where local elderly people facing hardship can live independently and affordably. Generously proportioned homes are grouped into clusters of ten split across two levels with shared facilities to encourage social interaction between residents. Circulation spaces, views and space through the levels internally, and terraces have been carefully considered to counter feelings of isolation and foster a strong sense of inclusivity.

The development is designed with Passivhaus-standard insulation and air tightness to prevent overheating, measures to harness excess heat from the offices to provide hot water for the homes and the use of air source heat pumps to remove all fossil fuel connections. Connections with nature are introduced across the site, with productive gardens

and social landscaped spaces at roof and street levels.

The scheme represents innovation in the housing sector through provision of a new approach to the almshouse typology to allow for higher density of residents and affordable provision without compromising on quality. This approach allows local elderly residents to continue living in their communities, in increasingly dense central urban areas, contributing to long-term balance and mix of communities.

"This is the culmination of a huge amount of dedication by all of our project partners which means that our elderly residents can continue to live independently, we're attracting new business to the area with the commercial element and contributing to the regeneration of the borough."

Caroline Croft, Chair of Southwark Charities' Trustees.



5–9 Rockingham Street & 2–4 Tiverton Street

Tiverton St, London SE1, Southwark

Status: **Proposed**
Completion: **2024**

Client: **Alumno Group**
Architect:

Maccreeor Lavington
M&E / Sustainability Engineer:
Silcock Dawson & Partners

Planning Consultant: **Turley**

Developer: **Alumno Group**

Heritage and Townscape

Consultants: **Montagu Evans**

Metrics:

Upfront Embodied Carbon (A1–A5): 739.48 kgCO₂/sqm

Life Cycle Embodied Carbon (all modules A–D): 1298.57 kgCO₂/sqm

Energy Use Intensity (heating, hot water, electricity): 83.3 kWh/sqm/year

CO₂ Emissions Intensity: 11.5 kgCO₂/sqm/year

Biodiversity Net Gain: 0.18
Urban Greening Factor: 28.51%



Belle Vue

Convent of Providence, Rowland Hill St, London NW3, Camden

Status: **Built**
Completion: **2019**

Client: **PegasusLife**

Architect: **Morris+Company**

Landscape Architect: **Camlins**

Structural Engineer: **Elliott Wood**

Environmental Engineer:

Max Fordham

Planning Consultant: **Tibbalds**

planning and urban design

Contractor: **ISG**

Cost Consultant: **Deloitte**

Construction Manager: **RISE**

Landscape Consultant: **Camlins**

Interiors: **Woods Bagot**

Interiors Executive Architect:

Architecture PLB

Metrics:

Predicted regulated energy use: 40.7 kWh/m²/yr — residential

Predicted on-site renewable energy generation: 0.95 kWh/m²/yr

BREEAM 'Excellent' achieved



The scheme regenerates a constrained brownfield site, providing 244 student beds, communal and commercial space in a 24-storey tower and revitalised railways arches for local businesses and public realm. The site is unsuitable for traditional residential housing but an innovative approach allows it to contribute towards housing delivery and free up existing stock whilst creating new public space.

Belle Vue is a holistic retirement community, demonstrating a dignified and inclusive design specific for older residents, which encourages community integration. This innovative, sustainable solution (BREEAM Excellent) helps tackle the growing isolationism of this age group. Its quartet of interconnected buildings create a sequence of landscaped gardens with communal and neighbourhood facilities.

Belsize Park Fire Station

37 Belsize Park Gardens,
Belsize Park, London NW3 4EE,
Camden

Status: **Built**
Completion: **2020**

Client: **Platinum Land Ltd**
Architect: **Tate+Co**
Structural Engineer:
Coyle Kennedy
M&E / Sustainability Engineer: **IN2**
Fire Engineer: **BB7**
Contractor:
Old House Development Ltd
Quantity Surveyor:
Costplan Group
Heritage Consultant:
DLG Architects LLP
Planning Consultant:
**Nicholas Taylor and
Associates**

Grade II* listed former Belsize Fire Station. Built in 1915. The development included extending and converting the historic building into 18 residential apartments, retaining heritage features. Key spaces were preserved and the distinctive white glazed brick and timber panelling repaired. The accessibility of the apartments, and the energy performance of the building were both greatly improved.



Canada Water, Plot K1

Roberts Cl, London SE16,
Southwark

Status: **Under Construction**
Completion: **2023**

Client: **British Land**
Architect: **Morris+Company**
Delivery Architect: **White Ink**
Structural Engineer: **AKT II**
Fire Engineer: **Olsson Fire**
Acoustic Engineer:
Sandy Brown
MEP: **Sweco**
Transport Consultant: **Arup**
QS: **AECOM**

Plot K1 provides 84 new homes, a communal garden and significant streetscape enhancements, as part of the wider Canada Water Masterplan. The scheme provides dwellings with internal layouts that have been choreographed to their use, including generous deck access; dual aspect with good daylighting and ventilation; and private and shared amenity areas that offer privacy and inspire community.



Dockley Apartments

134 Spa Rd, London SE16 3AE,
Southwark

Status: **Built**
Completion: **2022**

Client: **Matching Green**
Architects: **Studio Woodroffe
Papa and Poggi Architecture**
Collaborating Architect:
Poggi Architecture
Landscape Architect and
Consultant: **TO Studio**
Structural Engineer:
Elliott Wood, Terrell Group
M&E / Sustainability Engineer:
Max Fordham, RISE
Contractor: **Legendre Uk**
Planning Consultant: **Temple
Group, Walker Management**
Project Manager and Quantity
Surveyor: **Equals Consulting**

Affordable/ Social Housing
Provider:
Optivo, Southern Housing
Other: **GIA Surveyors, SCS**



100 per cent dual-aspect homes extend healthy outdoor spaces for neighbourliness, maximising views, light and ventilation. 35 different typologies offer diverse 'ways of life' in response to emerging live/work patterns, whilst increasing functional and spatial flexibility. Dockley offers almost double the private amenity required with generous balconies providing summer shading and outdoor eating. Landscaped communal roof terraces provide additional breakout space for the residents, offering views across London. Sheltered entrances, lobbies and semi-covered play space wrap around a spacious, communal courtyard garden.

Dover Court Estate

20 Dove Rd, London N1 3LU,
Islington

Status: **Built**
Completion: **2021**

Client: **Homes for Islington**
Architect:
Pollard Thomas Edwards
Landscape Architect:
Farrer Huxley Associates
Structural, M&E and
Sustainability Consultant:
Calfordseaden
Contractor:
Lovell Partnerships

Metrics:

Energy Use Intensity (heating,
hot water, electricity):
48.62 kWh/m²/yr (design
stage)

CO₂ Emissions Intensity:
Dwelling Carbon Dioxide
Emission Rate (DER)
18.67 kg/m²/yr



We drew upon co-design, retrofit and re-use, multigenerational planning, and landscape-led placemaking to repair and improve the '60s-built Dover Court Estate, and blend it into its wider Georgian setting. With minimal demolition and by weaving into the existing townscape, we added 70 new homes, along with a community centre, at the base of an existing tower.

Grace House

Dora House, 60 St John's Wood Rd, London NW8 7HN, Westminster

Status: **Built**
Completion: **2022**

Client: **Central and Cecil**
Architect: **Ryder Architecture**
Structural Engineer: **HDR**
MEP Engineer: **FHP**
Precast Engineer: **PCE Ltd**
Contractor: **Regal London**

Metrics:

Energy Use Intensity (heating, hot water, electricity):
84.7kWh/m²/yr

CO₂ Emissions Intensity:
37.43kg/m²/yr



A pioneering Later Living development in the heart of St John's Wood providing 170 new affordable homes designed and delivered in partnership with residents through a co-design process. Clusters of apartments can be converted from independent living to care supporting those with more complex needs and dementia, allowing residents to remain in familiar surroundings as their needs change.



Graphite Square

Unit 6, Graphite Square, Vauxhall Walk, London SE11 5EE, Lambeth

Status: **Under Construction**
Completion: **2024**

Client: **Third.I**
Architect:
Ben Adams Architects
Landscape Architect:
Martha Schwartz Partners
Structural Engineer:
Heyne Tillett Steel
MEP Engineer: **Max Fordham**
Acoustic Consultant: **WSP**
Planning Consultant: **DP9 Ltd**
Transport Consultant:
Caneparo Associates

Graphite Square will offer 160 new homes with 35 per cent affordable housing (including a mixture of social and shared ownership), generous public realm of 1800 sqm creating connections through the site from all directions with spacious courtyards, 8000 sqm of office space to provide opportunity for over 1000 jobs, a café to socialise and meet friends and a new church to replace the previous under-utilised one. The intention is for Graphite to be hugely beneficial to the local community, providing space for all.



Harrow Road

Warwick community Hall, 300
Harrow Rd, London W2 5HG,
Westminster

Status: **Planning Granted**
Completion: **2022**

Client: **Westminster City Council**
Architect:
Child Graddon Lewis
M&E / Sustainability Engineer:
Stantec
Contractor: **Willmott Dixon**
Project Manager: **WSP**
Landscape Architect:
Allen Pyke Associates

Metrics:

Energy Usage Low Temperature
Solution: 957 kVA

100% air source heat pumps



A residential-led, mixed-use scheme for Westminster City Council, Harrow Road is an estate regeneration project comprising of three blocks and extensive landscaping, allowing for the re-provision of existing community facilities, a nursery, new public realm, commercial spaces, and 112 new homes all available at social rent. The project is based around a new green heart at the centre of the scheme.

Holloway Park

Islington

Status: **Under Construction**
Completion: **Phase 1, 2026**

Client:
Peabody / London Square
Architect:
Alford Hall Monaghan Morris
Engineer: **Hoare Lea**



The site, previously used as a prison since the middle of the 19th century, is currently occupied by several contemporary prison buildings arranged around an existing central garden built in the 1980s. The historic site will become open to the public for the first time and deliver an ambitious affordable housing led scheme comprising 985 new homes, including 415 at social rent, together with new commercial spaces and a multi-functional Women's Building set within a new 1.4-acre public park.

Joyce Newman House / Joseph Lancaster Terrace

Middlestone House, Burbage Cl,
London SE1 4EP, Southwark

Status: **Built**
Completion: **2022**

Client:
**Leathermarket Community
Development Society**
Architect:
Bell Phillips Architects
Landscape Architects:
Anna French Associates
Structural and Civil Engineers:
Conisbee
Planning Consultant:
Maddox Associates
Development Manager: **Igloo
Regeneration Partnership**
Other: **Igloo**



Joyce Newman House is a community-led development of 40 social rent homes delivered through a unique collaboration between Southwark Council and Leathermarket Community Benefit Society. The development comprises a new block of 34 apartments and an adjoining terrace containing six houses that frame a new communal garden and open up new pedestrian links for the benefit of the wider estate. Workshops with local residents over more than a year shaped the project brief as well as its design.

Keybridge

76 S Lambeth Rd, London
SW8 1QU, Lambeth

Status: **Built**
Completion: **2022**

Client: **Mount Anvil, BT Property**
Architect: **Allies and Morrison**
Executive architect: **Fourpoint
Architects / Stockwool**
Landscape Architects:
**Townshend Landscape
Architects**
Structural Engineer: **Waterman**
Quantity Surveyor: **Sense**
Planning: **GL Hearn**
Other: **Fourpoint Architects**

Metrics:

Rainwater harvesting for
landscape irrigation has been
incorporated.

Lambeth's carbon offsetting
scheme to achieve the 'zero
carbon' standard for the
residential component of Phase
2. BREEAM: Very Good rating.
Code for Sustainable Homes
Level 2.



A small urban site packed with possibilities, Keybridge presents a friendlier, more neighbourly form of high-density redevelopment in the city. At 505 dwellings per hectare, Keybridge is the densest housing project in London, while still allowing for a third of the site to be opened up for public use. It offers an innovative blueprint for delivering characterful buildings with fluid public and private spaces and ultimately, a distinct and compelling identity for this pocket of Vauxhall.

Kilmuir House and 60–64 South Eaton Place

Ebury St, London SW1W, Westminster

Status: **Planning Granted**
Completion: **2026**

Client: **Native Land**
Architect: **Pilbrow & Partners**
Structural Engineer: **Waterman Group**
Services Engineer: **Hoare Lea**
Cost Consultant: **WT Partnership**
Planning Consultant: **DP9 Ltd**

Metrics:

Upfront Embodied Carbon (A1–A5): 787kgCO2/sqm

Life Cycle Embodied Carbon (all modules A–D): 1,183 kgCO2/sqm



Microliving

Howick Pl, London SW1, Southwark

Status: **Built**
Completion: **2019**

Client / Developer: **U+I Group**
Architect: **The Manser Practice**
Services Engineer: **Atelier Ten**



The proposals replace a 9-storey slab block that provided 49 substandard, uniform flats in a building that detracted from its historic context. The replacement 7-storey apartment building restores the urban context & transforms the quality, range & environmental performance of the 60 residential units provided. 20 family-sized units and 4 affordable units (zero existing) meet local housing need.

‘Proving there is still room to swing a cat’ The Manser Practice were appointed by U+I Group to design and demonstrate that smaller, well-designed flats could be offered to professionals in the city struggling to get onto the housing ladder. The studio makes clever use of joinery to create a compact but comfortable, liveable space — and takes learnings from methods used in the hospitality sector.

Penarth

16-28 Penarth St, London SE15
1TX, Southwark

Status: **Proposed**
Completion: **2024**

Client: **Moda Living**

Architect:

Child Graddon Lewis

Structural Engineer:

Lyons O'Neil

Cost Consultant: **Cast**

Planning Consultant: **Union4**

Metrics:

Upfront Embodied Carbon (A1–A5): 656.27kgCO2/sqm

Life Cycle Embodied Carbon (all modules A–D): 1,497kgCO2/sqm

Urban Greening Factor: 0.18



Penarth is a new 330-home, mixed-use and co-living neighbourhood located within Southwark's Old Kent Road Area Action Plan. The scheme demonstrates an imaginative approach to the re-provision and intensification of industrial land, whilst also unlocking potential to create new homes for a range of tenures — namely 283 co-living and 47 affordable homes, with shared amenities including a 24/7 gym.

Tustin Estate Regeneration Masterplan & Phase 1

Southwark

Status: **Planning Granted**
Completion: **2025**

Client: **Southwark Council**

Architects: **dRMM, JA Projects, Adam Khan Architects**

Landscape Architect:

Exterior Architecture

Structural Engineer:

Heyne Tillett Steel

MEP Engineer: **Loop**

Masterplan: **dRMM**

Community Engagement:

Beyond the Box

Sustainability Consultant:

Greengage

Project Manager: **Pulse**

Planning Consultant:

HGH Consulting

Daylight, Sunlight Consultant:

Delva Patman Redler

Transport Consultant and acoustics: **Entran**

Metrics:

Upfront Embodied Carbon (A1–A5): 538kgCO2/sqm

Life Cycle Embodied Carbon (all modules A–D): Modules A–C (excluding B6 & B7): 865 kgCO2/sqm, of which B–C (excl B6&B7): 327 kgCO2/sqm

Energy Use Intensity (heating, hot water, electricity):

73.5 kWh/sqm/year

Biodiversity Net Gain: 29.10%.
Urban Greening Factor: 0.4.



The original Tustin Estate in Southwark was completed by the Greater London Council in 1969. In 2021, owing to the bad state of repair of its homes, residents voted by ballot in favour of redevelopment. The design team then collaborated with Tustin's residents through faceted engagement, placing active listening and co-design at the heart of this resident-led scheme.

Westmead

19 Tavistock Rd, London W11
1AS, Kensington and Chelsea

Status: **Under Construction**
Completion: **2025**

Client: **City of Westminster**

Architect:

Child Graddon Lewis

Landscape Architect:

RPS Group

Structural Engineer: **CR8**

Cost Consultant: **Arcadis**

Sunlight/Daylight Consultant:

EB7

Passivhaus Consultant: **Etude**

Metrics:

Energy Use Intensity (heating,
hot water, electricity): 14 kWh/
sqm/year¹⁴

CO2 Emissions Intensity:
17kgCO2/sqm/year

Air tightness: 0.6



Westmead in Notting Hill is Westminster City Council's first Passivhaus-accredited development. Designed by Child Graddon Lewis, the project is a rigorously sustainable, medium-density, 65-unit housing scheme located at the edge of a conservation area, delivering 100 per cent genuinely affordable homes at social rent. Westmead demonstrates as to how net zero principles can be brought into social housing.

East

[Branch Place, Colville Estate](#)

[Citizens House](#)

[Melfield Gardens](#)

[New Courtyard Housing in Stratford](#)

[A House for Artists](#)

[Broadway East](#)

[Brunel Street Works](#)

[East Village Retrofit](#)

[East Wick and Sweetwater, Phase 2, Block 5.6](#)

[East Wick and Sweetwater, Phase 3, Block 5.8A](#)

[Farmstead Road](#)

[Gallions Reach – Beckton Riverside Masterplan](#)

[Greenwich Housing](#)

[Hackney New Primary School & 333 Kingsland Road](#)

[Herringham Quarter](#)

[Island Point](#)

[Manor Road – Phase 1](#)

[Motion](#)

[N05](#)

[Newham Emergency Family Accommodation](#)

[Portlands Place, East Village](#)

[Rom Valley](#)

[Spruce House and Studio](#)

[St Leonard’s Court](#)

[Sugar House Island \(Plots MU5 and R3\)](#)

[Sydenham Hill](#)

[Taylor & Chatto Courts and Wilmott Court, Frampton Park Estate](#)

[The Jazz Yard](#)

[Uplands Business Park](#)

[Vincent Street, Canning Town](#)

[Woodward Road](#)

Branch Place, Colville Estate

Hackney

Status: **Built**
Completion: **2019**

Client: **Hackney Council**
Architect: **Karakusevic Carson Architects LLP**
Landscape Architect: **muf architecture/art, Periscope**
Structural Engineer: **Peter Brett Associates, Tully De'ath**
Civil Engineer: **Peter Brett Associates**
M&E: **Peter Brett Associates, Cundalls**
Planning Consultant: **Tibbalds Planning and Urban Design**
Contractor: **Higgins Construction**

Metrics:

Design Stage (DER) 39.32
kWh/m²/yr (including 10%
PVs, excluding energy Centre)

Design Stage (TER) 45.39
kWh/m²/yr (including 10%
PVs, excluding energy Centre)

Code for Sustainable
Homes Level 4

Branch Place is the second phase of the renewal of the Colville Estate in Hackney. Part of a mixed-use masterplan for 925 mixed tenure homes, it is an exemplar of a collaborative approach to housing with 116 new homes, two commercial units and extensive landscaping.

In its creation for Hackney Council, the residents association (CETRA) were integral - informing massing, layouts, materiality and public realm — whilst a programme of engagement workshops enabled local area participation.

Across the project, soft landscaping, rainwater collection, permeable paving and a biodiverse roof assist rainwater runoff, while enhanced ecology improves the daily experience for residents. New homes enjoy generous outdoor spaces, ranging from balconies and terraces, to courtyards with integrated play spaces and communal roof terraces with allotment planters. Bike storage and space for home working has been provided for all, while a tenure-blind approach to detailing and organisation supports social mixing.

Branch Place was designed to exceed building regulation requirements pertaining to fabric performance and acoustics. Glazing specification, shading and internal blinds help reduce overheating whilst maintaining benefits from solar gain during colder periods, thus reducing energy bills and assisting comfort. The energy strategy includes a district wide heat network and a significant

reduction of carbon emissions achieved below Building Regulations.

The masterplan maximises cross-subsidy for Hackney Council, with market sale homes helping fund those for social rent. The community was involved in these discussions from the outset. The decision to increase the building heights of market sale elements supports viability and enables affordable low-rise homes elsewhere. The masterplan is being realised via a comprehensive phasing strategy, which will re-provide all existing council homes and enable residents to remain onsite until complete. Since completion, Karakusevic Carson Architects and Hackney Council have undertaken a review of completed homes to inform future phases.

“Branch Place represents a real exemplar of quality designed housing — social housing — that we, as a borough, can be very proud to have provided here.”

Miranda Ferrier, Project manager, Economy, Regeneration and New Homes, Climate, Homes and Economy Directorate. Hackney Council



© Peter Landers



© Peter Landers

Citizens House

Unity Way, London,
Lewisham

Status: **Built**
Completion: **2023**

Client: **London Community
Land Trust**

Architect: **Archio**
Landscape Architect:

Kinnear
Structural engineer:

Price & Myers
Planning consultant: **CMA**

M&E consultant: **Inginer**
Quantity surveyor:
Ian Sayer & Co

Citizens House is the first community land trust in London that has been directly created by the community using London CLT's unique affordability model, in partnership with Lewisham Citizens, Lewisham Council and the Greater London Authority.

Previously an underused garage site, the homes at Citizens House are genuinely affordable because home prices are linked to average incomes in Lewisham. 2-bedrooms are priced at £272,500 and 1-bedrooms are priced at £215,000, approximately 65 per cent of the market price for homes in the same neighbourhood, meeting the needs of local people who otherwise would be priced out of their communities. When residents move out, they must resell their homes at prices continually linked to local incomes, meaning they will be permanently affordable for generations to come.

The architects, Archio, were selected by the residents and members of the community through a public workshop. Following an extensive co-design process, a three-to-four storey building was developed that faces onto a landscaped courtyard with community cohesion embedded into its design, encouraging new and existing residents to interact and integrate over time. For example, the staggered balconies allow residents to talk to each other across the main facade, and the extra wide walkway to the rear allows space for meeting with neighbours and for children to play.

Located on a highly constrained site, the building has a stepped profile to address the change in height between the surrounding developments and has been carefully positioned to fit into the existing layout of the estate, whilst minimising impact on neighbouring residents and the school. A series of insets have been carved into the block to bring light into the centre of the building. The exterior is made up of a pale brick, with a central winding staircase at the rear, and solar panels on the roof.

"Citizens House would not be here without a genuine collaboration between Lewisham Citizens, the council and London CLT."

Janet Emmanuel, chair of the project's community steering group



Melfield Gardens

Melfield Gardens, London SE6, Lewisham

Status: **Under Construction**
Completion: **2024**

Client: **Phoenix Housing Association**
Architect, Landscape Architect : **Levitt Bernstein**
Structural Engineer: **Price and Myers / Walker Associates**
M&E Engineer: **Max Fordham / Whitecode**
Contractor: **Jerram Falkus**
Energy/Passivhaus Consultant: **Etude**

Metrics:

Upfront Embodied Carbon (A1-A5): 900kgCO2/sqm

Energy Use Intensity (heating, hot water, electricity): 43kWh/sqm/year

15kWh/sqm/year space heating demand

39% on-site renewable energy generation

Melfield Gardens is an intergenerational development in the London Borough of Lewisham, designed for older people and postgraduate students to live independently in a secure and socially inclusive environment. The scheme includes generous communal spaces, landscape and road improvements, and promotes social interaction between residents.

The scheme will provide 30 affordable homes for residents aged 55 and above, designed to attract under-occupiers of family-sized accommodation from within the local community. It will also provide two, four-bedroom homes for postgraduate students from a nearby University, to bring the benefits of intergenerational housing to both groups through a 'good neighbour agreement'. On this basis, each student will spend a number of hours a week assisting older residents, offering company or participating in the recreational activities to take place in communal spaces. In return, the students will be charged a lower rent. This will help to create a supportive, family-like environment and sense of belonging, enabling older residents to maintain their independence and stay in their own homes as they age.

The majority of homes are a dual aspect and flexible 'one-bedroom-plus' model that incorporates an additional 'study/hobby room' with a pocket door to allow it to become part of the main living space or remain separate. This provides residents with greater flexibility to tailor their homes to their

own requirements as they age in place, in line with HAPPI principles.

The two subtly cranked buildings partially enclose a pedestrian-prioritised central green space which retains public routes through the site to Beckenham Hill Station. A shared, south-facing 'garden room' wraps around into the protected garden for use by residents and their visitors.

As well as learning from this innovative social pilot, the client is keen to achieve a fully certified Passivhaus building as the first step towards a zero carbon future.

"There's a huge demand for affordable housing both for older people and students. The new development at Melfield Gardens will help to meet the need for both and offer a place where different generations can mingle and support each other."

Jim Ripley, Chief Executive, Phoenix CH



New Courtyard Housing in Stratford

Chobham Rd, London E15,
Newham

Status: **Built**
Completion: **2022**

Client: **Cliveden Land Ltd**
Architect: **Edward Williams Architects**

Landscape Architect:

Meeuwsen Muldoon

Structural Engineer:

HRW Engineers

Services Engineer:

DSA Engineers

Contractor: **KF London**

Acoustic Consultant:

KP Acoustics

Fire: **JGA Jeremy Gardner Associates**

Planning Consultant: **Michael Borough Associates**

CLT Specialists:

Canducci Group

Metrics:

Upfront Embodied Carbon
(A1–A5): 559 kgCO₂/sqm

Life Cycle Embodied
Carbon (all modules A–D):
996.7 kgCO₂/sqm

Energy Use Intensity (heating,
hot water, electricity):
45.7kWh/sqm/year

CO₀ Emissions Intensity:
16.64kgCO₂/sqm/year

The new courtyard housing in Stratford, London, is an infill development of nine new flats in elegant, landscaped courtyard buildings. In line with the Sustainable Community Strategy 2010-2030, the development provides additional homes for Newham borough designed for a variety of tenants and their accessibility and needs. The scheme is innovative for:

Under-resourced communities:

Designing bespoke mews-like homes around landscaped courtyards created a haven for the tenants on a previously underused carpark site used for fly-tipping and crime. The courtyards form a secure space for the community's children and adults to play and gather with the addition of substantial landscaping and the reduction of car parking spaces. The creation of safe communal spaces was prioritised to cultivate social interaction and sense of belonging, testifying to how the development went above and beyond in providing good quality of life to under-resourced communities in Newham.

Operational carbon and energy management & circular economy:

Net zero carbon strategies were imbedded from early stages. Building on a brownfield site to provide modern homes and amenities enabled avoiding any demolition or construction on greenfield sites. The housing was designed to be built in cross-laminated timber (CLT) structure

through a DfMA approach and included edge-to-edge PV panelled on the pitched roofs to marry high performance with stunning aesthetic. The whole dry construction is demountable and reusable in case of demolition. The One Click analysis done gave a carbon result very similar to retrofit per sqm during construction. In operation the early strategic decisions resulted alignment with LETI and RIBA Good Practice 2020.

Minimise disruption to communities:

A seamless few weeks on-site assembly followed the decision to use CLT structure. This also addressed the community's significant noise concern. The project is a result of addressing the concerns and aspirations of the community.

"The prefabricated buildings were constructed in a short time with minimal disruption to neighbourhood. By creating intimate landscaped courtyards in the underused carpark, the development contributes to the security and greening of the area."

Laura Carrara-Cagni, Director, EWA



A House for Artists

Barking

Status: **Built**
Completion: **2021**

Developer: **Be First**
Architect: **APPARATA**
Structural Engineer:
Expedition Engineering
M&E / Sustainability Engineer,
Acoustic Engineer:
Max Fordham
Contractor: **J. Murphy & Sons**
Cost Consultant: **Artelia**
Fire Consultant:
Menzies Consultants

Metrics:

Upfront Embodied Carbon (A1-A5): 371 kgCO2e/sqm

Life Cycle Embodied Carbon (all modules A-D): 482 kgCO2e/sqm

Energy Use Intensity (heating, hot water, electricity): 81.9kWh/sqm/year

CO2 Emissions Intensity: 40.2 kWh/m2 GIA/yr

Biodiversity Net Gain: >10%



© Johan Dehlin



© Apparata Architects

The apartments in A House For Artists have some of the qualities of a house: front and back outdoor space; pleasant places to meet neighbours; adaptability to residents' needs. This is made possible by a two-sided fire escape strategy, where corridor-free apartments feel larger but are NDSS, and residents can add or remove rooms to meet work or care needs.

Broadway East

1 Pritchard's Rd, London E2 9AS, Tower Hamlets

Status: **Under Construction**
Completion: **2025**

Client: **St William Homes LLP**
Architect: **RSHP**
Executive Architect: **DDU**
Landscape Architect: **Gillespies**
Structural Engineer, MEP: **WSP**
Planning Consultant:
Montagu Evans
Ecology Consultant:
Ecology Solutions
Transport Consultant: **TPP**
Right to Light Consultant: **Point 2**
Architecture and Heritage Consultant:
Tavernor Consultancy
Building Performance Consultant: **Energist UK**

Metrics:

Energy Use Intensity (heating, hot water, electricity):

Residential Units Design EUI = 54.5 kWh/ sqm/year;
Commercial Units Design EUI = 79.4 kWh/sqm/year

CO2 Emissions Intensity: 12.3 kgCO2/sqm/year for each dwelling

Biodiversity Net Gain: 731%
Urban Greening Factor: 0.3

Circular economy targets -
Demolition 97.9%, Excavation 99%, Construction 97.40%,
Municipal 65%, Landfilled diversity target, Recycled content 20%

The scheme will celebrate the unique industrial character of a London gasholder site, providing 555 new private and affordable homes, spaces for jobs, socialising and leisure, and over 1.75 acres of public open space and landscaping — framed by Regent's Canal and identified by the retention of two existing iconic gasholder frames. The physical reintegration of the site into the surrounding area will permit its adjacencies to naturally grow and will develop Regent's Canal's substantial frontage, making it publicly accessible.



© Credit



© Credit

Brunel Street Works

Charrington Steps City Hall,
London E16 1DF, Newham

Status: **Built**
Completion: **2022**

Client, Developer:
GLA & Opal LLP
Clients: **Countryside
Partnerships, Metropolitan
Thames Valley Housing**

Developers:
Fizzy Living, Linden Homes
Architects: **Hunters, GRID
Architects, Cartwright Pickard**
Landscape Architect: **Fabrik**
M&E Engineer: **Long & Partners**
Sustainability Engineer: **RES**
Structural Engineer:
Jenkins & Potter
Highways Engineer: **Ardent**
Masterplan: **JTP**

Planning Consultants:
Lichfields, **NLP**

Metrics:

The apartments feature
Secured by Design
accreditation and all homes
are accessible M4(2), with 10
per cent of them wheelchair
adaptable M4(3).

The scheme achieved Code for
sustainable home level 4 and
Building for Life.



Through extensive community and stakeholder engagement, Brunel Street Works transforms a complex site in Canning Town into a mixed-use urban quarter. 975 homes are split evenly between private rent, private sale & affordable housing — including 30 per cent family housing — with lower floors activated by 9000 sqm of mixed uses including a café, hotel, food store and employment space for creative sectors.

East Village Retrofit

Scarlet Cl, London E20,
Newham

Status: **Proposed**
Completion: **2024**

Client: **Get Living**
Architect: **Studio PDP**
Original Architect: **Lifschutz
Davidson Sandilands**
Retrofit Architect: **Studio PDP**
Engineer: **Buro Happold**
M&E / Sustainability Engineer,
Sustainability: **Etude**

Metrics:

Energy Use Intensity (heating,
hot water, electricity): Current is
139 kWh/sqm/year, target is
55 kWh/sqm/year by 2034

Performance review and feasibility study of an existing, large residential building on deep retrofit measures to meet net-zero. The study will consider how to reduce energy demand, remove the need for fossil fuel, renewable energy generation, energy flexibility and in-use verification. Overall the aim is to create better comfort for residents and ensure the homes are resilient for the future.



East Wick and Sweetwater, Phase 2, Block 5.6

Waterden Rd, London, Hackney

Status: **Planning Granted**
Completion: **2025**

Developer: **East Wick + Sweetwater Project** (a joint venture between **Places for People** and **Balfour Beatty Investments**)

Architect: **Sheppard Robson**
Planning Consultant: **Quod**



210 new homes in five apartment blocks and two housing terraces (both affordable and market sale) benefit from a communal garden, open space and architectural richness to form part of a new, diverse community. The new homes will be constructed to Code for Sustainable Homes Level 4+ and have exemplary thermal performance and airtightness, modelled to achieve an optimum form factor.

East Wick and Sweetwater, Phase 3, Block 5.8A

Waterden Rd, London, Hackney

Status: **Planning Granted**
Completion: **2026**

Developer: **East Wick & Sweetwater Project**
Architect: **Sheppard Robson**
Planning Consultant: **Quod**



Our part of Phase 3, situated next to the bustling Here East, includes three apartment blocks and four housing terraces, mostly affordable. At its centre is new green space/public realm, creating a pocket for the community to gather and play in. The homes will meet Code for Sustainable Homes level 4+, with exemplary thermal performance and airtightness, modelled to achieve an optimum form factor.

Farmstead Road

56 Farmstead Rd, London SE6 3ED, Lewisham

Status: **Proposed**
Completion: **2025**

Client: **Phoenix Community Housing**
Architect: **Metropolitan Workshop**
Planning Consultant: **BPTW**
Contractor: **Buxton Building Contractors Ltd**

Metrics:

Energy Use Intensity (heating, hot water, electricity): The predicted in-use energy consumption of Farmstead has been estimated as an average Energy Use Intensity (EUI) of 48.9 kWh/yr/m² GIA (Gross internal area).

Urban Greening Factor: 0.5567



Gallions Reach – Beckton Riverside Masterplan

Gallions Reach Shopping Park, 3 Armada Wy, London E6 7ER, Newham

Status: **Proposed**
Completion: **2030**

Client: **Abrdn**
Architect: **Corstorphine & Wright**
Landscape Architect: **Macgregor Smith**
Planning Consultant: **Montague Evans**



Metropolitan Workshop have designed 24 affordable homes for Phoenix Community Housing on a back garden site on the interwar Bellingham Estate. Designed to the Passivhaus Low Energy Building Standard, the proposals prioritise family homes and demonstrate how suburbia can be successfully intensified from 14 to 81dph. The architecture is inspired by local details from the Arts and Crafts movement.

The concept of a 15-minute neighbourhood, where Londoners can live, work, and access services within an easy walk from their homes, is targeted by the masterplan. Some 12,000 homes are delivered with supporting education, employment, and leisure facilities. The urban design and landscape framework plan extends an existing greenway through the heart of the new neighbourhood, following the line of high-pressure gas mains, thereby turning a significant constraint into a major opportunity for enhanced well-being, active travel, and biodiversity net gain.

Greenwich Housing

Bowness Cl, London SE9,
Greenwich

Status: **Built**
Completion: **2021**

Client: **Royal Borough of
Greenwich**

Architect: **shedkm**

Structural Engineer: **Conisbee
(groundworks) / Civic (houses)**

Services Engineer, M&E
consultant:

SCMS Associates

Contractor, QS, CDM Advisors
coordinator:

Elkins Construction

Landscape consultant:

BCA Landscape

External lighting designer:

SCMS Associates

Acoustic consultant:

Acoustics Plus

Project manager Employer's

Agent: **Blakeney Leigh**

Approved building inspector:

LABC

Metrics:

Energy Use Intensity (heating,
hot water, electricity): Heating
and hot water load: 20.42 kWh/
m²/yr - Strongbow Road

CO₂ Emissions Intensity:

Bowness Close:

-0.97KgCO₂eq/m². Strongbow
Road: 0.14 KgCO₂eq/m²



Hackney New Primary School & 333 Kingsland Road

333 Kingsland Rd, London
E8 4FD, Hackney

Status: **Built**
Completion: **2020**

Clients: **Downham Road JV,
Hackney New School Academy
Trust, Education and Skills Funding
Agency (ESFA) The Benyon
Estate, Thornsett, Dolphin Living**

Architect: **Henley Halebrown**

Landscape Architects: **Henley
Halebrown, Tyler Grange**

Structural Engineer: **Techniker**

M&E / Sustainability Engineer:
Elementa Consulting

Contractor: **Thornsett Structures**

Planting: **Jennifer Benyon Design**

Project Manager: **RLB**

Artist: **Paul Morrison**

Planning Consultant: **CMA Planning**

Metrics:

Energy Use Intensity (heating,
hot water, electricity):
kWh/sqm/year

88.4 kWh/sqm/yr (design -
residential & school)

Biodiversity Net Gain: 100%

On-site renewable energy
generation of 37.27kWh/m²/
yr, giving a net position of 56.13
kWh/m²/yr (design - residential
& school)

Design life of 60+ years

Residential water use: 41.8 l/p/
day (design)

This RIBA Neave Brown Award-winning project of 68 flats is emblematic of an ambition for affordable homes, palpably sustainable and embedded with social value. The well-planned apartments, mainly dual-aspect, have few or no corridors to make generous living spaces. Loggias exceed minimum standards and create valuable connections to the outside, heightening residents' awareness of their environment.



Herringham Quarter

Greenwich

Status: **Planning Granted**
Completion: **2026**

Client: **Hyde Housing**
Architect: **Alan Camp Architects**
Landscape Architect: **Grant Associates**
Masterplan: **Fletcher Priest Architects**
Project manager: **Martin Arnold**
Planning consultant: **Carter Jonas**
Transport consultant: **i-Transport**
Environmental assessment: **Buro Happold**



Herringham Quarter delivers quality affordable homes, ground floor employment, open spaces and an upgraded riverfront. Layering activities mitigates flood risk and is a key move to create a genuinely mixed-use neighbourhood. Buildings are scaled and positioned to protect residents from noise and air quality impacts, ensuring housing can co-exist with adjacent safeguarded wharfs and industrial operations. Fletcher Priest's masterplan framework enables the project to be a catalyst for wider change, unlocking development through significant infrastructure provision and improved connectivity.

Island Point

432 St Davids Square, London
E14 3WH, Tower Hamlets

Status: **Built**
Completion: **2020**

Client: **Chalegrove Properties Ltd**
Architect: **Squire and Partners**
Landscape Architect: **Farrer Huxley Associates**
Structural Engineer: **Walsh**
Services Engineer, M&E consultant, Fire Consultant: **Hoare Lea**
Traffic consultant: **WSP**
Approved building inspector: **MLM Building Control Limited**



Island Point is a residential development on Westferry Road, offering affordable homes in low-rise buildings. The development is centred around a south-facing garden square surrounded by building typologies that respond to the local context through their scale, proportion and choice of materials. Maisonettes are paired, townhouses are standalone units, and apartments are housed in larger warehouse style buildings. Private amenity is provided through large balconies and terraces which overlook the public spaces and community pavilion below.

Manor Road – Phase 1

3, 300 Manor Rd, London E16 4PA, Newham

Status: **Under Construction**
Completion: **2024**

Developer: **English Cities Fund**
Architect: **EPR Architects**
Structural Engineer: **AKT II**
M&E / Sustainability Engineer: **Essex Services Group**
Main Contractor: **Morgan Sindall Construction**

Metrics:

Upfront Embodied Carbon (A1–A5): 394.5 kgCO₂e/m² GIA

Life Cycle Embodied Carbon (all modules A–D): 656.7 kgCO₂e/m²

Energy Use Intensity (heating, hot water, electricity): 2134.7 kWh/m²/year

Whole Life Carbon: 33,084.7 kgCO₂e/m²



The project is transforming an unproductive retail site and creating a new residential community, with units for SME businesses and green space in Canning Town. The 804 new homes will go help address borough’s housing shortages. The scheme demonstrates the commitment of English Cities Fund to an area with significant regeneration challenges having previously delivered Rathbone Market opposite.

Motion

Lea Bridge Business Centre, ENTERPRISE PARK, Lea Bridge Rd, London E10 7NU, Waltham Forest

Status: **Built**
Completion: **2020**

Clients: **Hill, Peabody**
Architect: **Pollard Thomas Edwards**
Landscape Architect: **BDP**
Structural Engineer: **Brand Consulting Engineers Ltd.**
M&E Engineer: **DW Pointer & Partners**
Wind Consultant: **RWDI**
Transport: **Watermans**
Planning Consultant: **Jones Lang LaSalle**

Metrics:

Upfront Embodied Carbon (A1–A5): 513 kgCO₂/sqm

Life Cycle Embodied Carbon (all modules A–D): 809 kgCO₂/sqm

Energy Use Intensity (heating, hot water, electricity): 57.14 kWh/m²/yr (design stage)

Target Fabric Energy Efficiency (TFEE) 48.6 kWh/m²

Dwelling Fabric Energy Efficiency (DFEE) 44.3 kWh/m²

Motion is a 300 home-development in Waltham Forest. Sculptural, stylish and controlled, its expressive architecture is ranged across three sculptural towers which sit alongside two low-rise courtyard blocks rendered in dark brick. The towers’ aerodynamic look — is a conscious break with the New London Vernacular’s brick aesthetic.



N05

34 Honour Lea Ave, London E20 1HH, Newham

Status: **Built**
Completion: **2023**

Developer: **Get Living**
Architect: **Bell Phillips Architects**
Delivery Architect: **MSMR**
Contractor: **HG Construction**
Planning Authority: **LLDC**
Planning Consultant: **Quod**

Metrics:

Code for Sustainable Homes Level 4

BREEAM excellent for retail and community units

35% carbon savings under Part L 2013

Connects into the Equans District Heating network



Newham Emergency Family Accommodation

Newham

Status: **Proposed**
Completion: **2030**

Client: **Bedu UK**
Architect: **Morris+Company**
Structural Engineer: **Cooper Associates**
Services Engineer: **Prospero Projects**
M&E / Sustainability Engineer: **EPS Group**
Transport Consultant: **Motion**
Planning Consultant: **DP9**
Daylight and Sunlight: **Brooke Vincent + Partners**
Communications: **BECG**



N05 within East Village, offers 48 social rent family homes with retail and community uses on the ground floor and a public open space incorporating over 1,000 sqm of play space for the wider community. The building successfully completes the north-eastern corner of the village rationalizing the urban grid with the angled alignment of Celebration Avenue with a striking triangular building that is developed into a visual motif.

Newham Emergency Family Accommodation is a sensitive back-land development for 28 homes to be occupied on short term leases, whilst alternative permanent accommodation is secured. The user focused design provides tangible economic, social and environmental benefits for the community. The proposal resulted from co-design with people with lived experience, resulting in a dignified, shared home.

Portlands Place, East Village

Skylark Point, 1 Portlands Ct,
London E20 1JU, Newham

Status: **Built**
Completion: **2022**

Client: **Get Living London**
Funding Client:

Qatari Diar, Delancey
Architect: **Hawkins\Brown Ltd**

Landscape Architect:
Townshend and HED

Structural Engineer: **Walsh**
Services Engineer:

**Hurley Palmer Flatt and
Chapman BDSP**

Contractor: **MACE**
Project Manager :

**Cast Real Estate &
Construction Consultancy**

Cost Consultant: **Arcadis**
Acoustic Consultant: **RBA**

Facade Consultant: **Inhabit**
CDM Principal Designer:

Orsa Projects
Planning Consultant: **Quod**
Amenity design: **ID:SR**

Metrics:

Upfront Embodied Carbon (A1–
A5): 755kgCO2/sqm

Life Cycle Embodied Carbon
(all modules A–D): 1076kgCO2/
sqm (A–C exc B6/B7 and D)
28kgCO2/sqm (D only)

Energy Use Intensity (heating,
hot water, electricity): Total
electricity 1,899,334 kWh/year;
Total water 1,375 m3



Portlands Place provides 524 new build-to-rent homes in a socially unified building. There are generous amenity and green spaces at ground floor level and a dramatic tenth floor skybridge, complete with lounges, communal dining rooms, cinema room, wellness studio, informal working and meeting spaces, and extensive roof gardens. With High Rise Solutions (HRS) Mace's specialised MMC system, it was possible to install a floor per week, lessening vehicle movements by 40 per cent and significantly reducing environmental disruption, noise, and pollution.

Rom Valley

Havering

Status: **Proposed**

Client: **Mitheridge**
Masterplanner and Architects:

Fletcher Priest Architects
Landscape Architect:

Spacehub
Sustainability, energy and MEP

Consultants: **Scotch Partners**
Environmental Assessment

Coordinator: **Quod**
Planning Consultant: **DP9**

Transport Consultant:
Iceni Projects

Rights of light and wind
assessment: **GIA**

Townscape consultant:
Neaves Urbanism

Metrics:

Upfront Embodied Carbon (A1–
A5): Commitment for buildings
to aspire to achieve a rate of
<300 kgCO2e/m3 (GIA)

Life Cycle Embodied Carbon
(all modules A–D): Commitment
for buildings to aspire to
achieve a rate of <625
kgCO2e/m3 (GIA)

Energy Use Intensity (heating,
hot water, electricity):

Aspiration to target an Energy
Use Intensity of 35 kWh/m2/
year and reduced space heating
demand of 15 kWh/m2/year
documented in Design Code

Urban Greening Factor: 0.4

Rom Valley transforms a retail park and industrial estate into an attractive and well-connected neighbourhood a ten-minute walk from Romford town centre, with a new riverside walking route to the station. It delivers a vertical mixed-use development with apartments above light industrial spaces, including careful consideration of the servicing of these units to minimise impact on residents, integrating townhouses and duplex homes. The mix of uses brings activity and character to the area, creating a sustainable living and working neighbourhood.



Spruce House and Studio

56 Beulah Rd, London E17 9LQ,
Waltham Forest

Status: **Built**
Completion: **2021**

Architect: **ao-ft**
Landscape Architect:
Meeuwse Muldoon
Structural Engineer: **Entuitive**
Fire Consultant:
IFC Group Fire Consultants
Contractors: **PSS London,**
ConstruktCLT

Metrics:

Upfront Embodied Carbon (A1–A5): kgCO2/sqm: 311 Embodied carbon to practical completion excluding sequestration (A1–A5)

Life Cycle Embodied Carbon (all modules A–D): kgCO2/sqm 336 (A–C) 206 (A–D)

Energy Use Intensity (heating, hot water, electricity): 106kWh/sqm/year



A prototypical house constructed from renewable resources that can be replicated at scale within the urban environment. Located on an infill site and assembled in 5 days, the shell of the house was built using CLT for its benefits of carbon sequestration, construction sequencing, and cost. This methodology rethinks the existing model of terraced housing, giving greater access to sustainable homes.

St Leonard's Court

9 New N Rd, London N1 6JB,
Hackney

Status: **Built**
Completion: **2020**

Client: **Hackney Council & Countryside Properties**
Architect, CDM Co-ordinator:
Child Graddon Lewis
Landscape Architect:
Townshend Landscape Architects
Structural Engineer:
Corbett & Tasker
M&E / Sustainability Engineer:
Ramboll
Main Contractor:
Countryside Properties
CAD software used: **Revit**

Metrics:

Conservation of heat is achieved through the following U-values:

Walls: 0.15 w/m2k

Windows: 1.5 w/m2k

Roofs: 0.10 w/m2k

Ground: 0.15w/m2

St Leonard's Court is 71 new homes in Hackney, with 40 per cent affordable. The scheme fundamentally promotes the health and wellbeing of its residents — all have access to the surrounding picturesque views and the sensory-rich experience created by the shared central courtyard and roof gardens. *"It's the best home I've ever had. I love our garden and started growing my own vegetables."* Michael Jones, Resident.



Sugar House Island (Plots MU5 and R3)

11 Sugar House Ln, London E15
2ZQ, Newham

Status: **Under Construction**
Completion: **2025**

Client: **Vastint UK**
Architect: **Morris+Company**
Landscape Architect: **Planit-IE**
Executive Architect:
Bryden Wood
Engineer: **Mott Macdonald**
Structural Engineer:
Engineers HRW
Masterplan: **ARC-ML**
Planning Consultant: **GL Hearn**
Buildings Regulations
Consultant: **Assent**
Transport Consultant:
Peter Brett Associates LLP
Fire Consultant: **FDS Consult**

Townscape and visual impact
assessment: **LDA Design**
Heritage Consultant:
Montagu Evans



Sydenham Hill

Sydenham Hill, London,
Lewisham

Status: **Built**
Completion: **2025**

Client:
City of London Corporation
Architect: **Hawkins\Brown**
Structural Engineer: **Stantec**
Landscape Architect:
TO Studio
Project Manager:
Turner & Townsend



Sugar House Island is a new neighbourhood pioneering a model of high density, low-rise living with a neighbourly public realm network of treelined streets, courts and mews. Morris+Company designed two plots: MU5; 42 homes across a pair of unique sculpted blocks, grounding a public square and enjoying views of the Grade I listed Three Mills. The canal side R3 features a trio of residential styles.

Every one of the 110 homes in this development is social rent, delivering truly affordable flats and houses in Lewisham for the City of London. Located within an existing estate, the design navigates complex constraints including tree retention, overlooking a steeply sloping site and a context rich in heritage, to deliver an infill scheme which enhances the existing estate and its rich ecology.

Taylor & Chatto Courts and Wilmott Court, Frampton Park Estate

149 Well St, London E9 7LJ, Hackney

Status: **Built**
Completion: **2021**

Client: **London Borough of Hackney**
Architect: **Henley Halebrown**
Landscape Architects: **Townshend Landscape Architects, Farrer Huxley**
Structural Engineers: **Peter Brett Associates, WBD Group**
M&E / Sustainability Engineers: **Peter Brett Associates, Peter Deer and Associates**
Cost Consultant, Project Manager: **Pellings**
Planning Consultant: **CMA Planning**

Fire Consultant: **Salisbury Fire**
Approved Inspector: **ACT**
Contractor: **Guildmore**

Metrics:

Upfront Embodied Carbon (A1–A5): 680 kgCO₂/sqm (Taylor & Chatto Courts); 580 kgCO₂/sqm (Wilmott Court)

Energy Use Intensity (heating, hot water, electricity): 60 kWh/sqm/year (design); 32 kWh/sqm/year (electricity, in-use)

Design life of 50+ years



© Nick Kane



© Nick Kane

With repair rather than regeneration in mind, the scheme stitches two new buildings into the estate, accommodating 45 homes. The scheme is 78 per cent affordable and 22 per cent sale, all tenure blind. Focussing on the dignity and well-being of current and future residents, 65 per cent of the homes are dual and 25 per cent triple aspect, and the journey choreographed with generous daylight hallways, loggias and carefully detailed staircases.

The Jazz Yard

Cranbrook Mews, London E17, Waltham Forest

Status: **Built**
Completion: **2023**

Client: **Sixty Bricks**
Architect: **Bell Phillips**
Delivery Architect: **On Architecture**
Landscape Architect: **PRP**
Structural Engineer: **Peter Brett Associates**
Planning Consultant: **CMA**
Contractor: **Equans**

Metrics:

Energy Use Intensity (heating, hot water, electricity): 96.11 kWh/sqm/year (average predicted)

CO₂ Emissions Intensity: 18.99 kgCO₂/sqm/year (average predicted)

BREEAM Excellent (NHS Health Centre)



© Kilian O'Sullivan



© Kilian O'Sullivan

Part of Sixty Brick's wider masterplan of a former industrial site close to St James Street Station. The Jazz Yard is a mixed-use development containing 83 new homes (50 per cent affordable) as well as a new Health Centre. The development sits at the intersection of a new residential neighbourhood and a new workspace quarter and is a high-density landmark building close to Walthamstow supporting the vitality of the Town Centre alongside new pedestrian and cycle connections and an improved public realm.

Uplands Business Park

Longfield Avenue Walthamstow,
London E17 7BD,
Waltham Forest

Status: **Proposed**
Completion: **2034**

Developer: **BlackRock/NEAT
Developments**

Architect: **Allies and Morrison**
Landscape Architect:

**Bradley-Hole Schoenaich
Landscape Architects**

Engineer: **Meinhardt**

Planning Consultant: **Turley**

Transport Consultant: **Ardent**

Metrics:

Upfront Embodied Carbon (A1–
A5): Block A: 740 kgCO2/sqm
GIA. Block B: 878 kgCO2/sqm
GIA

Life Cycle Embodied Carbon
(all modules A–D):

Block A: 949 kgCO2/sqm GIA
(excl. B6 & B7). Block B: 1147
kgCO2/sqm GIA (excl. B6 & B7)

Energy Use Intensity (heating,
hot water, electricity):

Industrial elements estimated to
be 46 kWh/m2 GIA.

Residential elements estimated
to be 24 kWh/m2 GIA.



Uplands Business Park is a 5.45ha site located between Blackhorse Lane and the Walthamstow Wetlands, home to a mix of creative businesses and traditional industry. Key to its redevelopment into a mixed-use neighbourhood is the long-term retention of industrial uses alongside the introduction of housing, designed in line with agent of change principles. Innovative co-located typologies locate up to 1,800 high-quality homes, commercial and community uses adjacent to re-provided industrial uses, allowing industry to thrive alongside the new mixed-use community.

Vincent Street, Canning Town

7 Vincent St, London E16 1LS,
Newham

Status: **Planning Granted**
Completion: **2025**

Client:

London Borough of Newham

Architects:

**Jestico + Whiles, Deft.Space,
ArchitectureDoingPlace**

Landscape Architect:

AS URBAN

Engineer: **Buro Happold**

Masterplanner and Urban

Design: **AR Urbanism**

Regeneration Specialist:

Urban Delivery

Metrics:

Upfront Embodied Carbon
(A1–A5): 620 kgCO2/sqm
Life Cycle Embodied Carbon (all
modules A–D): 1,060 kgCO2/sqm

Energy Use Intensity (heating,
hot water, electricity):
kWh/sqm/year

Heating 15.4 kWh/sqm/year
Hot Water 24.6 kWh/sqm/year
Electricity 2.7 kWh/sqm/year
Total 42.8 kWh/sqm/year

CO2 Emissions Intensity:
11.42 kgCO2/sqm/year

Biodiversity Net Gain: -78.76%
Urban Greening Factor: 0.4



Kickstarting the first phase of a major estate regeneration masterplan, Vincent St provides 147 affordable homes for LB Newham alongside a new public square and community centre. Co-designed with estate residents, the scheme responds to the local need for family and intergenerational housing by providing 5-bedroom townhouses amongst maisonettes and apartment blocks.

Woodward Road

Woodward Rd, Dagenham RM9
4SJ, Barking

Status: **Under Construction**
Completion: **2023**

Client: **Be First**
Architect: **Morris+Company**
Landscape Architect: **MRG**
M&E / Sustainability Engineer:
Max Fordham
Structural Engineer: **Elliott Wood**
Civil Engineer: **Lewis Hubbard**
Project Manager:
Bailey Garner
Daylight/Sunlight Consultant:
GIA
Planning Consultant: **Be First**
Air Quality Consultant: **Phlorum**
Traffic & Transport Consultants:
Motion

Woodward Road is 56, 100 per cent affordable homes, alongside rejuvenated community provision. The homes are situated along a new low-rise shared-surface street adjacent to the 1930s former library, and a new prominent corner extension — Collectively these re-provide community spaces, alongside doorstep play spaces and private gardens. Passive principles in the building fabric reduces energy consumption.



Broadwater Farm Estate

Haringey

Status: **Planning Granted**
Completion: **2035**

Client: **Haringey Council**
Architect: **Karakusevic Carson Architects LLP**
Landscape Architect: **East Architecture Landscape Design**
Structural Engineer, Civil Engineer: **Elliott Wood**
M&E / Sustainability Engineer: **XCO2**
Planning Consultant: **CMA Planning (Charles Moran Associates)**
Community and Engagement Collaborator: **Beyond the Box**
Consultants: **The Means, The Glass-House**
Community-led Design Urban Strategies: **What if**

Metrics:

Upfront Embodied Carbon (A1-A5): 843kgCO2/sqm

Life Cycle Embodied Carbon (all modules A-D): kgCO2/sqm

Biodiversity Net Gain: 128.87%
Urban Greening Factor: 0.40

Karakusevic Carson Architect's Broadwater Farm Estate project is an opportunity to deliver new council homes and to completely rethink how development can enable wider improvements.

At the heart of the estate, the project provides a range of spacious new homes across three plots. A wide-range of dwelling sizes promote mix and are well-insulated, relying on passive measures to keep fuel bills down. Elsewhere, a new energy centre includes low carbon technology decarbonising the existing district heating network.

Together the sites offer half a mile of new streets with new buildings featuring regular front doors and communal entrances to promote visibility and make it safer to navigate. Improved streets support wider area connectivity by encouraging walking, cycling and public transport use and reduce journey times to local jobs, schools, care facilities and shops just 15 minutes away.

Inclusivity is a core part of the project and new park spaces will reflect the character of those existing with no loss of provision. New trees, planting and recreation throughout the estate will improve ecology and biodiversity and provide health benefits by improving local air quality. By prioritising the needs of girls when designing public spaces, the physical and mental health of groups easily overlooked can be directly addressed.

During the design process, new community groups were forged and will assume stewardship of

collective spaces once delivered, ensuring social value in the long term. Opportunities for skills and training were also created, allowing residents to benefit from change and young people raised on Broadwater Farm produced a public exhibition, podcast and free workshops to celebrate the lives of residents and their stories.

The project introduces affordable workspace initiatives with flexible tenancies on the estate to improve residents' access to employment with the overall aim of boosting knowledge, confidence and so creating a resilient local economy.

"There can be no doubt that a positive outcome of the regeneration will be that residents will feel much safer, and that streets will be opened up, and there will be more leisure space, which will give young people a sense of belonging."

Maureen Duncan, Headteacher, The Brook School



© Karakusevic Carson Architects



© Karakusevic Carson Architects

Selby Urban Village

Haringey

Status: **Proposed**
Completion: **2025**

Client: **Haringey Council**
Architect: **Karakusevic Carson Architects LLP**
Landscape Architect: **Adams & Sutherland Landscape**
Structural Engineer: **Elliot Wood**
Civil Engineer: **Lewis Hubbard Engineering**
M&E: **XCO2**
Planning Consultant: **Tibbalds**
Planning and Urban Design: **Jennifer Ross Consultancy**

Metrics:

Life Cycle Embodied Carbon (all modules A-D):

Total kg CO2/sqm GIA

Module A1 -A5: 693
Module B1-B5: 146
Module B6-B7: 1,075
Module C1-C4: 99
Module D: -4

Urban Greening Factor: 0.422

The Selby Urban Village project arises from a shared aspiration between Haringey Council and the Selby Trust to create a community focused mixed-use neighbourhood in Haringey, London. Developed through close collaboration with local community groups, the project seeks to enhance the networks and enterprises of the Selby Centre, deliver 215 new social rent council homes and improve the surrounding green spaces. The project is an exemplar of how a local authority and the third sector can work together to deliver shared goals to create a fairer and greener city.

Optimising public land, the project reworks the site of the existing Selby Centre and provides a purpose-built new building at the heart of the neighbourhood with new connections created between Bull Lane Park, sports facilities, the Selby Centre and the wider area. Homes are organised around a climate-resilient street with wide pavements, SuDS, informal play, trees and biodiversity. Public squares at each end of this green link are activated by the new centre and a corner shop. Throughout the engagement process safety was highlighted and the two-sided street features open facades with front doors, prominent bike stores and windows overlooking the street.

The high proportion of family homes, drive for 100 per cent dual aspect and the site's tricky edges (including industry, parkland and existing low-rise homes) has resulted in varied building types with massing and organisation responding to specific

contexts, whilst maximising daylight to homes and adjacent communal spaces.

Across the project, communal entrances are boldly expressed at street level to increase their visibility and ensure they feel welcoming and front doors to maisonette homes are paired to combat isolation and promote community. The southern residential building combines with existing homes to form a large courtyard garden and is conceived to foster neighbourliness, incorporating doorstep play and community growing.

"The Selby Urban Village is a sustainable partnership with the Selby Trust's culturally rich communities at its heart. The village will provide the community with new high-quality homes and services, set in inspirational green spaces."

Jack Skinner, Development Manager, The Selby Trust



Woodridings Court

157 Crescent Rd, London
N22 7RX, Haringey

Status: **Under Construction**
Completion: **2025**

Developer: **London Borough of Haringey**
Architect: **Collado Collins**
Landscape Architect: **Turkington Martin**
Engineer, Structural
Engineer: **Cre8 Structures**
Services Engineer: **Flatt Consulting**
Quantity Surveyor: **Michael Edwards Associates**
Project Manager: **Denise Lindsey**

Metrics:

Upfront Embodied Carbon (A1-A5): 694 kg CO₂ e/m²

Life Cycle Embodied Carbon (all modules A-D): 880 kg CO₂ e/m²
CO₂ Emissions Intensity: 1,209 t.CO₂e

Urban Greening Factor: 0.38

Space heating requirement: 5.03 kWh/m².yr
Photo voltaic (PV) output: 50,239kWh.yr

Woodridings Court is part of Haringey Council's programme to build 3,000 new council homes by 2031 — work has been completed or is underway on over 2,000 homes.

The scheme will use Modern Methods of Construction (MMC) to transform a derelict car park and build 33 new high-quality, energy efficient homes. The pioneering project is the world's first residential use of Seismic's Universal Platform for Category 1 Volumetric, which reduces construction to assembling a 'kit of parts.' Each 'kit' is procured separately, combined by fabricators, and delivered to site, meaning more high-quality homes built quicker and at lower cost.

Off-site construction enables use of multiple manufacturers to expand production beyond the site's physical constraints; with site installation of ten 3D modules per day per crane. Problem suppliers can be 'swapped-out' avoiding re-design or full-scale re-tendering.

Haringey's innovative 'plug-n-play' approach sees designers specify standardised sets of interoperable components with defined interfaces and key fixed dimensions, before choosing from existing components, developing new ones, or mixing them.

Standardised connectors and a common structural grid system reduce waste and improve safety and assurance, making it very sustainable. The process enables testing of

whole assemblies and designs compared to traditional construction that only tests materials.

Haringey is utilising cutting-edge digital design techniques and off-site factory construction to create well-built, sustainable new homes that achieve a 100 per cent reduction in whole life carbon and reduce maintenance costs. Fully BREEAM compliant, these new homes have a guaranteed, minimum lifespan of 60 years and an expected lifespan equal or greater than conventionally built housing.

MMC will cut build time by 10-12 months over traditional methods, minimising disruption for existing residents. The scheme will also install lifts, create new entrances and co-designed communal gardens.

"Woodridings Court is the world's first residential use of Seismic's Category 1 Volumetric Platform. It'll deliver sustainable homes a year faster than conventional construction, giving a Haringey family a fresh start in a beautiful new home."

Jack Goulde, Senior Project Manager



Frankum Mews

Crawley Rd, London E10,
Haringey

Status: **Under Construction**
Completion: **2024**

Client: **Frankum Mews**
Architect:
Corstorphine & Wright
Structural Engineer :
Michael Barclay Partnership



A contemporary mews terrace of 10 houses and 19 apartments is provided in 2 separate blocks, framing a new pedestrian and cycle link in this award-winning scheme, with an aim of rejuvenating a collection of warehouses between Crawley Road and Downhills Way in Wood Green. Access through the site is opened by the scheme, and the new green link is bound by two linear blocks of accommodation. A pedestrian-focused mews street is created, encouraging people to utilise the route.

Fusion at Brent Cross PBSR

119 Brent Terrace, Brent Cross,
London NW2 1LR, Barnet

Status: **Under Construction**
Completion: **2025**

Client: **Fusion Group**
Architects: **Corstorphine & Wright (Planning Permission gained by Howells)**
Structural Engineer:
Shear Design
Mechanical Engineer, Electrical Engineer:
Amber Management & Engineering Services



Student Living is placed at the heart of the new Brent Cross Town Masterplan by this scheme, which provides 662 rooms in a design-led, high-quality environment, offering a home that enriches university experiences. An extensive mix of amenities, including event spaces, a coffee shop, and zero-waste shop, as well as study lounges and fitness and wellbeing studios, including an external terrace, will be offered by the scheme.

Addiscombe Road

Addiscombe Rd, Croydon CR0, Croydon

Status: **Planning Granted**
Completion: **2028**

Client: **Fifth State**
Architect: **Squire & Partners**
Engineer: **chapmanbdsp**
Planning Consultant: **DP9**
Fire consultant: **BB7**

Metrics:

Upfront Embodied Carbon (A1-A5): ≤ 500 kgCO₂e/m² (A1-A5).

Life Cycle Embodied Carbon (all modules A-D): 468 kgCO₂e/m²

Energy Use Intensity (heating, hot water, electricity): 1,657,033 kWh

Urban Greening Factor: 0.4619941



Addiscombe Road is a mixed-height development providing 498 shared living apartments, along with 84 new on-site affordable homes and 594 sqm of community and commercial space. A planted roof terrace introduces greenery to this urban setting, whilst kitchens, well-being studios, spas, cinemas and co-working spaces are located throughout the building to promote social interaction between residents.

Arun House, Kingston

Cambridge Grove, KT1 3HU, Kingston upon Thames

Status: **Built**
Completion: **2023**

Client: **Kingston Council**
Architect: **A&Q**
Contractor : **Countryside Partnerships**
Agent: **Ikon**

Metrics:

CO₂ Emissions Intensity: 9.21kg/CO₂/sqm/year (10.9 tonnes site wide per year). This equates to an overall 57.6 per cent reduction in regulated CO₂ emissions over the Part L 2013 baseline.



Arun House is part of Kingston's Small Sites Programme, transforming redundant sites to deliver the first new council homes in a generation. 18 high quality flats, including two wheelchair adaptable homes, have been created. To meet net zero carbon targets sustainability features include solar panels, enhanced thermal efficiency, electric space and water heating and EV charging points.

Cambridge Road Estate regeneration

6 Excelsior Ct, KT1 3EN, Kingston upon Thames

Status: **Under Construction**
Completion: **2037**

Client: **Royal Borough of Kingston upon Thames**
Developer:
Countryside Partnerships
Architect: **Patel Taylor**
Planning Consultant: **Stantec**

Metrics:

Upfront Embodied Carbon (A1-A5): 264 kgCO₂/M²GIA.

Life Cycle Embodied Carbon (all modules A-D): Total emissions A-C 664 KG CO₂/M²GIA over 60 years.

Energy Use Intensity (heating, hot water, electricity): Design Fabric Energy Efficiency is 41.16 kWh / m² / year.

CO₂ Emissions Intensity:

Site-wide Carbon Dioxide Emissions & Cumulative Savings - 1371 tonnes CO₂ per annum equivalent to 63% of baseline Pt L 2013 Compliant development.

Biodiversity Net Gain: Phase 1 70% net gain. Masterplan 96% net gain.



© The Table Creative



© The Table Creative

Cambridge Rd Estate regeneration: 941 affordable homes (767 at council rent) totalling 2170 new homes over 10–15 years. Aims to tackle housing issues, ASB and overcrowding, offering quality housing, jobs and health initiatives to uplift lives and the local economy. CRE is among England's most deprived areas with higher rates of long-term health conditions/risk factors compared to its surroundings.

Chalkhurst Court

17 Lismore Rd, South Croydon CR2 7QA, Croydon

Status: **Built**
Completion: **2020**

Client: **Elysian Properties Ltd**
Architect: **Tate+Co**
Structural Engineer: **Engenuiti**
Quantity Surveyor: **Tate+Co**
Contractor:
Cobalt Green Construction
Sustainability Consultant: **Etude**

Metrics:

Energy use intensity (design): 62 kWh/m²/yr

Based on Nilan Compact P for heating, hot water and ventilation.

Operational carbon emissions: 1.88 kgCO₂/m²/yr

Based on carbon content of electricity of 30gCO₂/kWh (estimated future 30 year average from Treasury Greenbook)



© TateandCoArchitects



© TateandCoArchitects

This project creates eight new one and two bedroom apartments on this prominent corner site, and demonstrates how we can increase density in our suburbs whilst remaining sensitive to the surrounding low-rise context. We worked carefully within the confines of the existing site to give each new residential unit a private external area, with a series of carefully considered landscape spaces.

Former Tooting Police Station

251 Mitcham Rd, London SW17 9JQ, Merton

Status: **Planning Granted**
Completion: **2025**

Developer: **Telereal Trillium**
Architect: **Collado Collins**
Planning Consultant, Heritage Consultant: **Turley**

Metrics:

Biodiversity Net Gain: 259%
Urban Greening Factor: 0.4



The project secured a viable future for the Grade II Listed Tooting Police Station delivering 62 high-quality residential units, amenity space and community space through conversion of the building and single storey rooftop extensions. Retrofit of the existing building to modern standards reduced embodied carbon and exemplifies sustainable delivery of homes by applying circular economy principles.

Idlewild Mews

Croydon

Status: **Built**
Completion: **2022**

Client: **London Borough of Croydon**
Architect: **vPPR Architects**
Structural engineer: **Pell Frischmann / Simpson TWS**
Planning Consultant: **Carter Jonas**
Contractor: **Selsdon Building Contractors**
QS: **Arcadis/ Ian Sayer & Co**
M&E consultant: **Arcadis/ Desco**
Project manager: **Arcadis / Faithful+Gould**
Building Control: **Croydon Council Building Control**

Idlewild Mews is an affordable-rent housing development for Croydon Council located within a complex infill site. The volumetric design ensures privacy for nearby residents while engendering a sense of community within the development. It's characterful shape, materiality and colour variations provide a sense of identity for the homes and yet these are clear references to the existing landscape.



Lion Green Road

16 Lion Green Rd, Coulsdon
CR5 2NL, Croydon

Status: **Built**
Completion: **2023**

Client: **Brick By Brick**
Architect:

**Mary Duggan Architects with
RUFFARCHITECTS**

Landscape Architect: **Planit-IE
(pre-con)/ RUFFARCHITECTS
(post-con)**

Employer's Requirement:

Common Ground Architects

Structural Engineer: **Symmetrys
(pre-con)/ JFP (post-con)**

Service Engineer:

**Max Fordham (pre-con)/
DMO (post-con)**

Contractor: **CField**

Project Manager: **Gleeds /
Faithful+Gould (pre-con);
CAST (post-con)**

Planning Consultant: **DP9
& Gerald Eve (pre con)/
RUFFARCHITECTS & ROK
(post con)**

Metrics:

Energy Use Intensity (heating, hot
water, electricity): kWh/sqm/year

Predicted operational energy:
15-17 kWh/m²/yr (regulated);
Predicted total energy load: 18-
20 kWh/m²/yr (regulated)

Urban Greening Factor: UGF: 0.36

35% on site renewable energy
generation provided through PV
panels



Lion Green Road is a landscape-led residential development of five sculpted pavilions with 157 homes. Each block is carefully rotated to manage proximity and views over the surrounding landscape. This typology achieves more homes than originally thought possible on the site, and the arrangement generates spatially rich layouts with corner loggia, re-engaging with the landscape from the interior.

Nine Elms

Nine Elms Ln, London,
Wandsworth

Status: **Under Construction**
Completion: **2024**

Client: **London Square**

Architect: **Morris+Company**

Collaborating Architect:

Gort Scott

Executive Architect:

Architectus

Structural Engineer:

Heyne Tillett Steel

MEP: **Hoare Lea**

Development Management: **M3**

QS: **Aecom**

Landscape: **Camlins**

Masterplanner:

Allies + Morrison

Nine Elms Plot E is a c300 home build-to-rent housing scheme. Arranged around a resident's courtyard, shared amenity and mixed use spaces will activate the public realm and observe the pedestrianised linear park. Plot E consists of four distinct blocks each with a different facade character, conceived from an 'on plot' architectural collaboration. Offsite manufactured panels will also be used.



Queen's Quarter

Taberner House, Park Ln,
Croydon CR9 3JS, Croydon

Status: **Built**
Completion: **2022**

Client: **Taberner House LLP /
Hub Residential**

Architect: **Allford Hall Monaghan Morris**

Landscape Architect: **Grant Associates**

Structural Engineer: **Whitby Wood**

M&E Consultant: **DSA**

Quantity Surveyor, Project
Manager:

Gardiner & Theobald LLP

Acoustic Consultant: **Cole Jarman**

Approved Building Inspector:

Bureau Veritas

Main Contractor: **Henry**

Construction Projects Limited

MEP: **DSA**
Cost Consultant:
Gardiner & Theobald

Metrics:

Energy Use Intensity (heating,
hot water, electricity):

The regulated energy
consumption is 62 kWh/m²/yr

107 kWh/m²/yr for the non-
domestic areas of the building.

This generates an overall
regulated operational energy
use estimate (heating, hot water,
fans and pumps & lighting) of
64 kWh/m²/yr for the building.

CO₂ Emissions Intensity:
8.41 kgCO₂/sqm/year



RACS Redevelopment, Upper Tooting Road

202 Upper Tooting Rd, London
SW17, Wandsworth

Status: **Built**
Completion: **2022**

Client: **Barrowfen Properties**

Architect: **Chetwoods**

Structural Engineer: **Tully De'Ath**

M&E / Sustainability Engineer:

MWL Mendick Waring Ltd

Project Manager:

Ian Sayer & Co

Contractor:

Henry Construction

Planning Consultant:

Peter Pendleton Associates



A key regeneration site, the scheme provides space for retail, leisure & cultural activities, bringing new homes & jobs to the area. The popular Queen's Gardens has been re-imagined by landscape architect Grant Associates in collaboration with interested local stakeholders, resulting in a new larger, public space.

A mixed-use commercial, hotel and residential development on Tooting High Street that regenerates the local area while retaining and refurbishing the historic 1930s Art Deco facade of the RACS building.

Sunday Mills

23 Trewint St, London SW18
4HB, Wandsworth

Status: **Built**
Completion: **2022**

Client: **DTZ Investors**
Developer: **Halcyon**
Development Partners
Architect: **Assael Architecture**
Landscape Architect: **Farrer Huxley Associates & Park Hood**
Structural Engineer: **WSP & Walsh**
MEP Engineer: **WSP & Caldwell**
Structural, Energy/Sustainability, MEP and BREEAM Consultant: **WSP**
Contractor: **McAleer & Rushe**
Planning Consultant: **DP9 Ltd**
Quantity Surveyor: **Savile Brown**
Transport Consultant: **TTP Consulting**

Fire Consultant: **Design Fire Consultants**
Communication Consultant: **Cascade Communications**
Daylight/Sunlight Consultant: **EB7**
Environmental, Acoustic and Air Quality Consultant: **Mayer Brown**
Heritage and Townscape Consultant: **Montagu Evans**
Metrics:
Upfront Embodied Carbon (A1-A5): 544 kgCO_{2e}/m²
Energy Use Intensity (heating, hot water, electricity): 236 kWh/m² per year
CO₂ Emissions Intensity: 21.4 kgCO_{2eq}/m²
BREEAM Excellent



© McAleerandRushe



© Luke Hayes

Nestled along the River Wandle in Earlsfield and harnessing its natural setting, Sunday Mills is a pioneering co-living building that offers Londoners an aspirational form of renting. Alongside 315 meticulously-designed studios and all-in rents, residents benefit from an array of shared amenities and publicly-accessible spaces that encourage community-building and help to combat social isolation.

Ten Degrees

East Croydon Station (Stop E7),
Croydon CR0 1LF, Croydon

Status: **Built**
Completion: **2020**

Client: **Greystar and Henderson Park**
Developer: **Tide Construction Ltd**
Architect, Landscape Architect, Interior Designer: **HTA Design LLP**
Structural engineer: **Barrett Mahony Consulting EnginHeers and MJH Structural Engineers**
Main contractor: **Tide Construction Ltd**
Operator: **Greystar**
Modular manufacturer: **Vision Modular Systems**

Planning Consultant: **HTA Design LLP**
M&E consultant: **Vector Design**
Interior design: **HTA Design for the communal spaces**
Sustainability consultants: **HTA Design & Evolucion**

Metrics:

Upfront Embodied Carbon (A1-A5): 642kgCO₂/sqm

Life Cycle Embodied Carbon (all modules A-D): 717kgCO₂/sqm (excluding operational modules B6-B7 i.e. embodied only)



Ten Degrees, Croydon sets new standards of design quality and construction efficiency for high-rise living in our urban centres following a decade of collaboration between architect, client, constructor and manufacturer. Reaching a height of 135m, the project delivers 546 build-to-rent homes within a pair of 38 and 44-storey towers.

Winstanley and York Road estates

Grant Rd, London SW11,
Wandsworth

Status: **Under Construction**
Completion: **2034**

Clients: **London Borough of
Wandsworth, Taylor Wimpey**
Developer:
WinstanleyYorkRoadLLP
Masterplanner: **HTA**



Our housing occupational therapist oversees the design of new build housing by working with residents to determine housing need and ensuring that homes are accessible, adaptable and inclusively designed. This includes lighting, acoustics, finishes and landscaping. This improves quality of life, provides savings by avoiding later adaptations and enables people to live in their homes longer.



St Raphael's Estate Masterplan

Brent

Status: **Proposed**
Completion: **2028**

Client: **Brent Council**
Architect: **Karakusevic Carson Architects LLP**
Landscape Architect:
Periscope
Structural Engineer: **Lewis Hubbard Engineering**
Civils: **Lewis Hubbard Engineering**
MEP Engineering:
Max Fordham
Project Manager:
Network Homes
Planning Consultant:
Tibbalds Planning and Urban Design

Metrics:

Upfront Embodied Carbon (A1-A5): Phase 1 of the project achieves 410 kgCO2/m2 (excluding sequestered carbon)

Biodiversity Net Gain: 8.52% for Phase 1 and 10% for the wider masterplan
Urban Greening Factor: 0.6 for phase 1

St Raphael's Estate sits within the Stonebridge ward of the London Borough of Brent, with the North Circular Road to the south and the River Brent to the west. The estate is made up of 759 homes with the majority owned and managed by Brent Council and includes a number of commercial units and community organisations.

Brent Council appointed Karakusevic Carson Architects in July 2019 to lead a multi-disciplinary design team working closely with residents. The practice conducted an intensive series of workshops to establish community priorities for the area and investigate opportunities and constraints around the themes of 'home', 'community' and 'sustainability'. Workshops were supplemented with resident-led guided walks and visits to completed projects with talks with residents who have been through the process on other projects. Additionally, skills workshops by The Glasshouse Community Led Design team to helped give residents the urban design tools to fully contribute to the process. Led by designers, these sessions were separate from the process and gave residents space to ask questions about design development and planning and explore ideas without being constrained by the specific circumstances of the St Raphael's Estate. Information gathered was then analysed and incorporated into proposals and communicated back to residents at exhibitions for further comment and refinement.

Bringing residents into the heart of the process and giving them time to come to terms with design concepts and the scale of change, allowed the masterplan to develop with their support. With mutual understanding of priorities, normally tricky conversations about parking or density became nuanced discussions around support for local businesses and alternatives to car dominated streets. Residents were keen to understand the sustainability of proposals and advocated strongly for the inclusion of passive measures that would keep the running cost of new homes and community buildings affordable.

"Improving the lived experience of St Raphael's residents has and remains a priority for the Council and designs for the estate reflect this ambition."

Zak Rezig, Senior Development Manager, Housing Supply & Partnerships, London Borough of Brent.



55 West, West Ealing

32 Drayton Green Rd, London W13 8RY, Ealing

Status: **Planning Granted**
Completion: **2023**

Clients: **Southern Grove, Metropolitan Thames Valley**
Architect: **DMWR Architects**

Metrics:

CO2 Emissions Intensity: Commercial spaces achieved a 46% improvement in CO2 emissions over Building Regulations Approved Document Part L1A

Residential accommodation reached 60% improvement in CO2 emissions over the baseline requirements at Planning stage.



Landmark 20 storey 100 per cent affordable residential tower in West Ealing will provide 144 affordable apartments with split level ground floor amenity, generous roof terrace, private balconies or winter gardens and communal spaces. It was granted approval via an appeal with the inspector praising 'exemplary design.' Built on a brownfield site in a highly sustainable location next to the new West Ealing station, the scheme will deliver high quality public realm and enhance the local townscape, aiding wayfinding around the station.

Edith Summerskill House

3 John Smith Ave, London SW6 7TW, Hammersmith

Status: **Planning Granted**
Completion: **2025**

Clients: **Stanhope plc, Peabody, London Borough of Hammersmith & Fulham**
Architect: **Henley Halebrown**
Structural Engineer, Services Engineer: **Arup**
Quantity Surveyor: **Deloitte**
Planning Consultant: **Gerald Eve**
Transport Consultant: **Vectos**
Contractor: **Higgins Partnerships**

Metrics:

BREEAM Excellent (target);

Decrease in total CO2 per annum of 61% over the baseline (target)



A 21-storey 100 per cent affordable residential tower with 133 homes that elevates the experience of social housing. The design appears to juxtapose two towers one behind the other. This not only makes for a more slender form but also means that 70 per cent of the apartments are dual aspect. High-rise affordable housing is uncommon. The design seeks to play up the civic and communal character of the building.

Greenford Quay

425 Oldfield Ln N, Greenford
UB6 0AS, Ealing

Status: **Under Construction**
Completion: **2023**

Client, Developer: **Greystar**
Architects: **HTA Design LLP, SLCE, Hawkins Brown, Mae, Flanagan Lawrence**
Structural Engineer: **Meinhardt**
Interior Designer: **Woods Bagot, Johnson Naylor, HTA Design LLP**
Planning Consultant: **Iceni Projects**
M&E / Sustainability Engineer: **Meinhardt**
Cost Consultant: **Alinea Cost Consulting**
Contractor: **Tide Construction Ltd**

Metrics:

Upfront Embodied Carbon (A1-A5): 507kgCO2/sqm

Life Cycle Embodied Carbon (all modules A-D): 717kgCO2/sqm

Modular benefits:

42% reduction in construction programme

40% reduced CO2 emissions

97% factor waste recycled

86% reduction in vehicle movements

86% reduction in construction waste on site



Milton Road, Poets Corner

9 Station Rd, Harrow HA1 2UF,
Harrow

Status: **Planning Granted**
Completion: **2025**

Developer: **Wates Residential**
Architect: **Sheppard Robson**
Planning Consultant: **CBRE**



Two buildings of the Greenford Quay masterplan have been completed, with a 3rd on site, providing over 950 homes; all built using modular construction that reduces carbon emissions by 40 per cent. Residents enjoy 24hr concierge, larger-than-standard apartments and a range of amenities, where regular events happen. Discount Market Rents are available throughout 'pepper-potted' and tenure-blind.

The first project of the Harrow Strategic Development Partnership, delivering 1,500 new homes, workspace and various amenities over the next 10 years. We believe that no site is too constrained to offer a significant contribution to everyday life. This spirit of meaningful and sensitively delivered interventions sets the tone for the wider regeneration and the unlocking of civic potential.

Television Centre Plot H1 and H2

Wood Ln, London W12,
Hammersmith

Status: **Under Construction**
Completion: **2024**

Clients:

Stanhope plc, Mitsui Fudosan

End-user Client: **Peabody**

Architect: **Maccreanor**

Lavington

Landscape Architect:

Gillespies LLP

Engineer: **Arup**

Project Manager: **Avison Young**

Cost Consultant:

Core Five LLP

Planning: **Gerald Eve**

Building Control: **BYL**

External sun-shading in the form of colourful shutters was carefully integrated into Maccreanor Lavington's elevation design to avoid overheating and ensure a pleasant temperature in all flats. This low energy solution, which is widely used on the continent, limits solar gain and is a future proof response to hotter climate. As moving elements, the shutters add interest and continuing change to the appearance.



Unity Place

28 Kilburn Park Rd, London
NW6 5LA, Brent

Status: **Built**
Completion: **2021**

Client: **London Borough of Brent**

Design Architects: **Feilden**

Clegg Bradley Studios

Design Architects: **Alison**

Brooks Architects, Gort Scott

Delivery Architects: **RM_A**

Landscape Architect:

Grant Associates

Civic Engineer, M&E Engineer,

Structural Engineer:

Buro Happold

Quantity Surveyor, CDMC:

Sweett (UK) Ltd

Contractor: **Telford Homes**

Ecology Consultant:

Biodiversity by Design

Unity Place provides 235 social rented homes, a community hub, landscape amenity, public playspace, carparking and an energy centre serving the wider estate. The 100 per cent affordable development is organised around the reinstatement of historic street patterns. The buildings nestle harmoniously into their surroundings, with biodiverse planting to provide a rich variety of habitats. By creating a coherent urban block, strongly defined streetscapes, active frontages and large expanses of landscape amenity, the redevelopment restores the character and scale of the neighbourhood.

Metrics:

Upfront Embodied Carbon (A1-A5): 575 kgCO₂e/m² (GIA)

Embodied carbon figures are for A1-5, B1-5, and C1-4, not module D

Energy Use Intensity (heating, hot water, electricity): 31–41 kWh/m²/yr depending which block



Wembley North East Lands

49 Olympic Steps, Wembley Park, Wembley HA9 0WS, Brent

Status: **Under Construction**
Completion: **2025**

Client: **Quintain**
Architect: **Haworth Tompkins**
Landscape Architects:

Gross Max and BHSLA

Facade Engineer:

Eckersley O'Callaghan

Services Engineers: **Griffiths**

Evans, HE Simm & Son,

Foreman Roberts and Halsion

Structural Engineer: **Elliott Wood**

Contractor: **John Sisk & Son Ltd**

Precast: **Techrete**

Balconies: **Sapphire Balconies**

Windows and Doors:

Reynaers and Everglade

Metrics:

Upfront Embodied Carbon (A1-A5): 510 kgCO2/sqm

Life Cycle Embodied Carbon (all modules A-D): 1018 kgCO2/sqm

Energy Use Intensity (heating, hot water, electricity): 79 kWh/sqm/year

Urban Greening Factor: 0.37



Part of a 10 million sq ft masterplan, these 750 homes maximise benefits of Design for Manufacture & Assembly through prefabrication & standardisation. Pre-cast concrete facade panels typically consist of a fully installed window & balcony door opening. Balconies are fixed directly to the facade with stainless-steel hooks. All major innovations for fire safety, reduced embodied carbon & airtightness.

Products

[SiteSolve](#)

[Happy Homes toolkit](#)

SiteSolve

Type: **Product**

Credits:

Clarion, VU.CITY

VU.CITY has leaped into the world of AI with our Generative Design tool called SiteSolve. Its purpose is to innovate the built environment industry and deliver the very best new housing at pace.

SiteSolve, developed by leading global engineering, design, and consultancy company, Ramboll, is a platform that leverages the power of algorithms and computational modelling to automate and enhance the design process on sites.

Feasibility studies have traditionally taken quite some time. Sourcing, aggregating, analysing, and contextualising data at scale and in context is often impossible.

With SiteSolve, users can input specific goals or constraints, which it then uses to rapidly design the site while adhering to these metrics.

This unprecedented pace enables users to run feasibility studies in under an hour, explore thousands of design options and configurations, and quickly determine the viability of a site.

SiteSolve allows users to explore a wide range of possible design solutions and configurations to find the ones that best meet their needs.

The technology is helping developers understand the potential of a site, architects are exploring 1000's of design options and local authorities are using it to understand site capacity across their borough at unprecedented speed and accuracy.

Generative Design technology is already gaining traction in the built environment, as evidenced by the investment of major players such as Clarion Housing.

This technology has proven effective in streamlining processes, expediting site feasibility studies, and avoiding expensive last-minute design changes, resulting in significant cost savings.

While SiteSolve is a standalone product, it works interoperably with the VU.CITY platform. This means you can now have the site's current and emerging context for your chosen design and assess it using VU.CITY's analysis tools.

Find out more and book a demo at vu.city/sitesolve#demo

"At Clarion we are utilising VU.CITY's generative design platform, SiteSolve, to create fast and reliable feasibility studies based on robust information. This allows us to make data-driven, informed decisions, at pace, from the start of a project and increase the quality of the product we're deliver"

Dave Lee, Director of Digital Design & Offsite Manufacture at Clarion Group



Happy Homes toolkit

Type: **Product**

Credits:

Pollard Thomas Edwards and the University of Reading with funding from Knowledge Transfer Partnership (KTP) backed by Innovate UK



Together with the University of Reading, we are developing the 'Happy Homes' toolkit. Led by Gloria Vargas Palma, the project is centred upon quantifying POE data in housing — so we can incorporate social value outcomes into buildings at the design stage. Part of a KTP backed by Innovate UK, the ongoing project means engaging with a wide variety of stakeholders that we hope will lead to a transformational model the wider housing industry will buy into.

Concepts

[A new Urban Structure for Equitable Housing](#)

[Alton Estate's People's Plan](#)

[Emergency Reappropriation](#)

[Places to Live](#)

[Pop-up Container Housing](#)

[Rail Overbuild](#)

A new Urban Structure for Equitable Housing

Type: **Concept**

Credits:

Concept & Design:
Fanis Anastasiadis
Architecture



This is a modular housing proposal for equitable housing, focused on simplicity, sustainability and variety of the modules, and the easiness of their construction and assembly by non specialised local builder teams with cheap materials. The modules can create neighbourhoods of different uses, from a series of flats, to residential/commercial/education/entertainment neighbourhoods, to a city block.

Alton Estate's People's Plan

Type: **Concept**

Status: **Proposed**

Credits:

Researchers and urban designers: **University College London (UCL)**

Community Partner: **Alton Action**

Community Partner Support: **Just Space**

Quantity Surveyor: **ECP Partnership**

Metrics:

Upfront Embodied Carbon (A1-A5): 140.6 kgCO₂/sqm

Life Cycle Embodied Carbon (all modules A-D): 393.17 kgCO₂/sqm

Energy Use Intensity (heating, hot water, electricity): 30 kWh/sqm/year

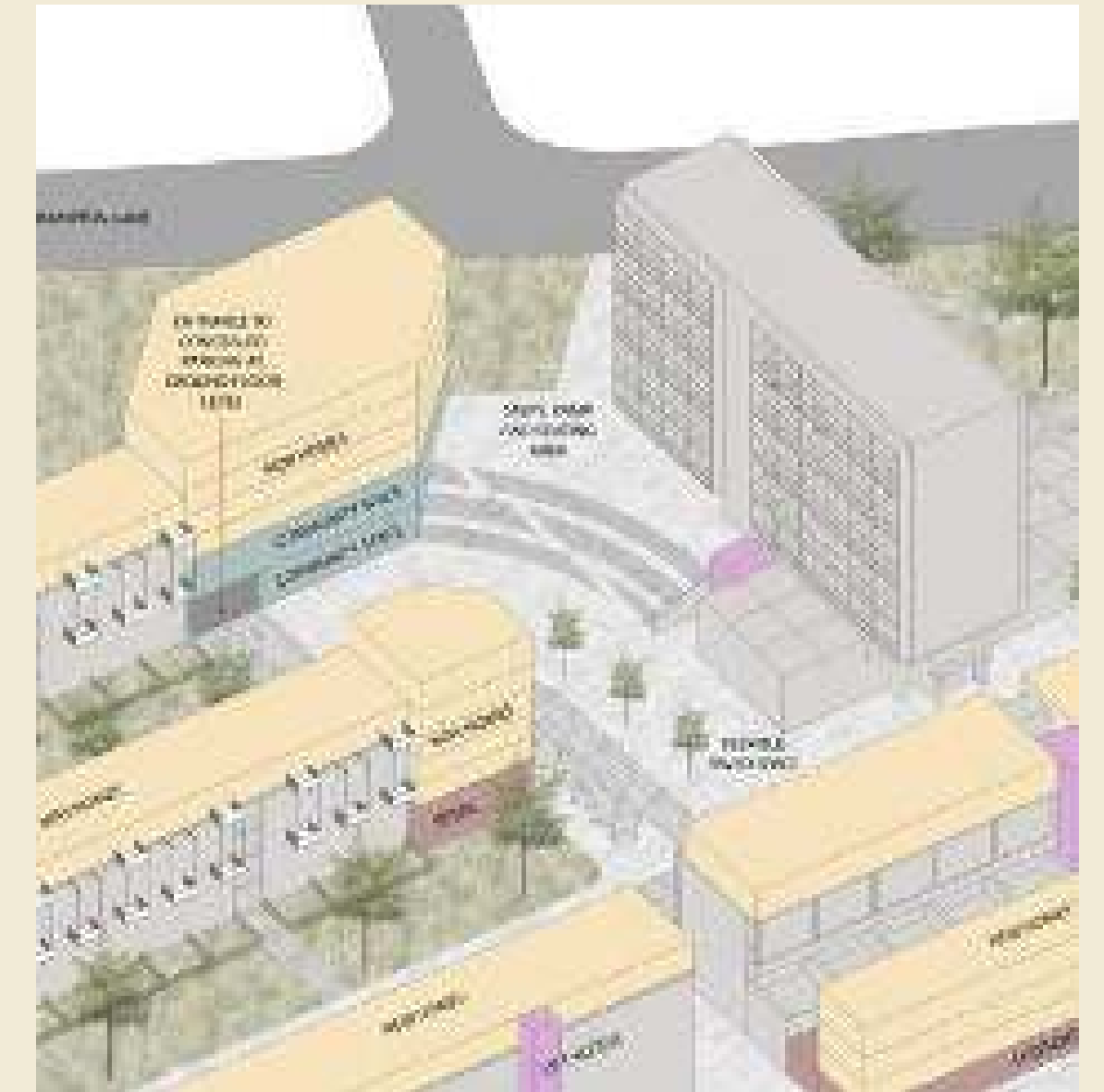
CO₂ Emissions Intensity: 10.64 kgCO₂/sqm/year

Ozone Depletion = 0.33 kgCFC11e

Acidification = 14028.01 kgSO₂e

Abiotic depletion potential for non-fossil resources = 214.77 kgSbe

Abiotic depletion potential for fossil resources = 38561682.95 MJ



The Alton Estate's People's Plan is a community-led proposal to improve the quality of life of residents. Wandsworth council was planning to redevelop part of the estate. Residents came together and, with the help of UCL, co-designed a more socially, environmentally, and economically sustainable proposal through retrofitting existing homes and proposing new infill homes and social infrastructure.

Emergency Reappropriation

Type: Concept

Credits:

Studio naama
(Natalie Savva, Mark Rist,
Shaomin He)



EMERGENCY REAPPROPRIATION
+ the radical emergence of a new domestic network



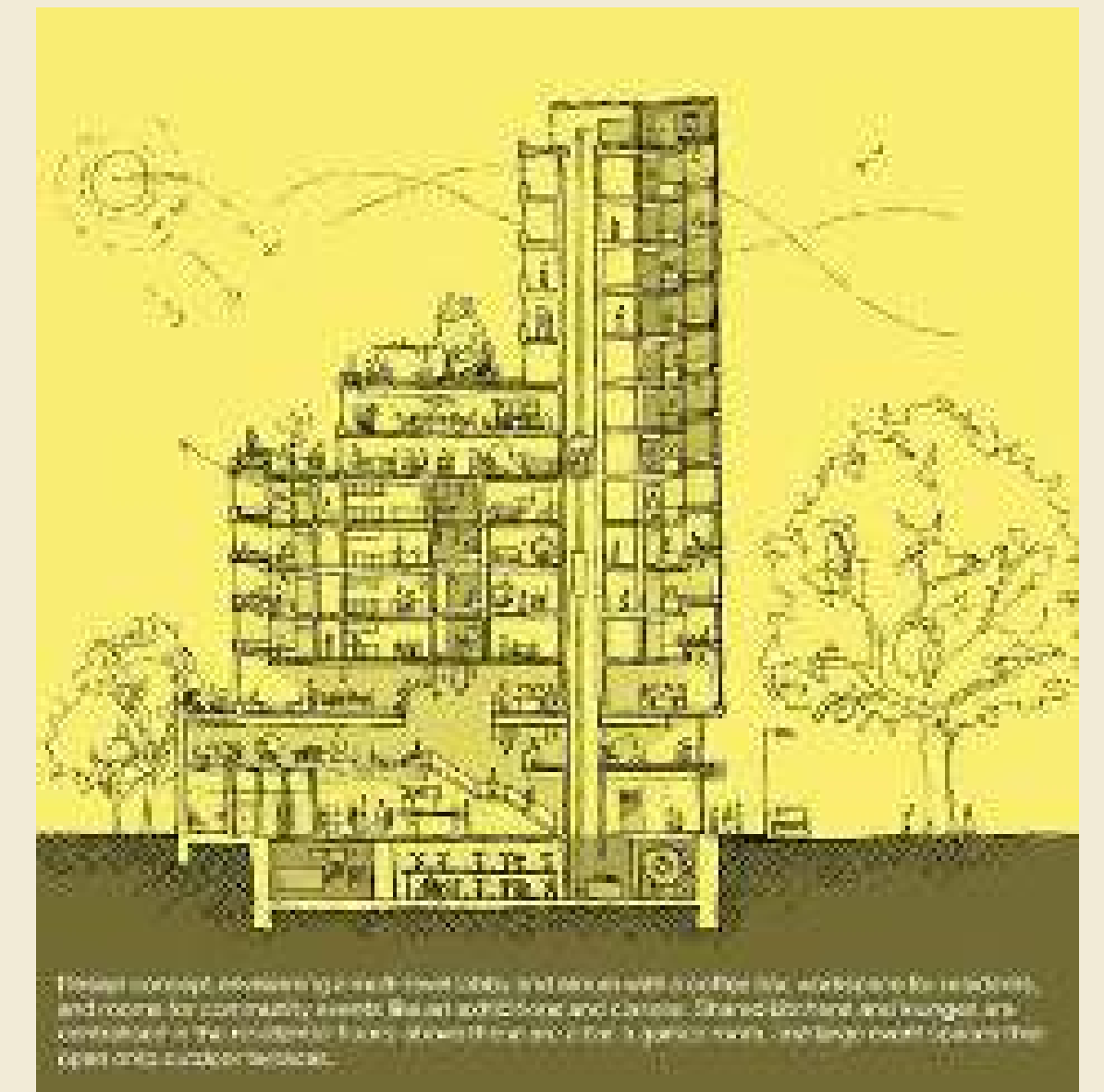
‘Emergency Reappropriation’ reflects upon the increasing dissolution of traditional domestic networks and the growth of an individualistic global society where everyday intimacy with one’s immediate community is hugely diminished. The project examines the architect’s role in grassroots urbanism, celebrating how self-initiated acts can be interwoven between small communities with the potential to empower both the individual and the collective through co-dependency in communal domestic settings — to build identities and live creatively.

Places to Live

Type: Concept

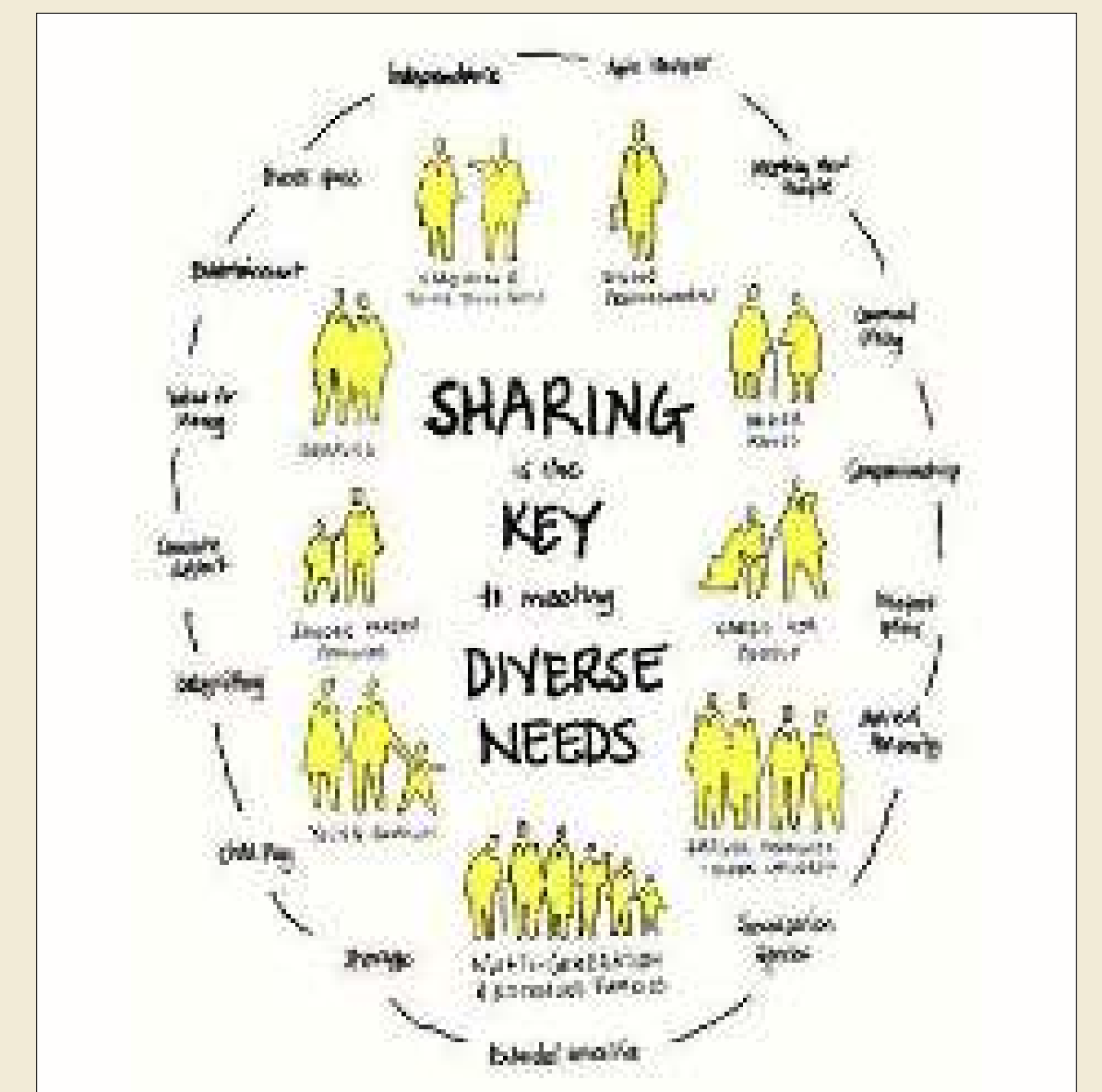
Credits:

Make Architects



‘Places to Live’ addresses a multi-generational, multi-tenure and multi-tenure living typology for rental, and rooms for community events, shared facilities and services. Shared facilities and lounges are central to the residential floor plates, offering a space for a variety of uses, and to be used upon the open and outdoor spaces.

Places to Live examines how to unlock social value by embracing principles of sharing in the design and delivery of urban housing. Demographic research, spatial analysis and design concepts are combined to present ideas for diversifying the urban rental market with new residential typologies that unite various generations, incomes and tenures. Low-impact living is embraced, with an emphasis on wellbeing, adaptability, affordability, carbon reduction and increased scale for increased quality.



Pop-up Container Housing

Type: **Concept**

Credits:

Lead Architect:
FBM Architects



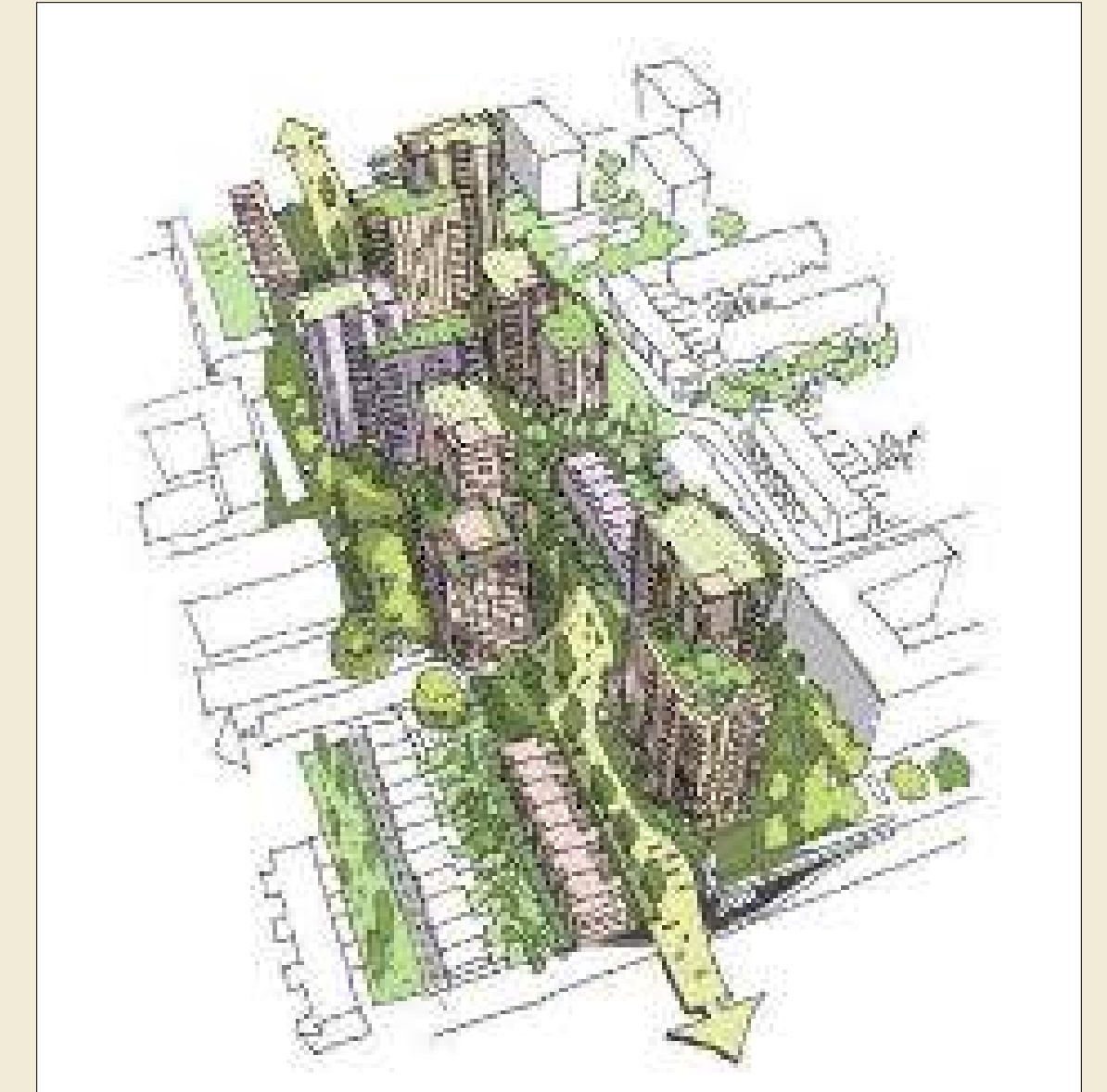
FBM have experimented with adapted shipping containers on a student residence and a café. We translated this into a kit-of-parts for contemporary, sustainable, single-person, affordable housing to improve employment in Aylesbury. The are arranged as a staggered terrace and added a laundry room and bike store. Being stackable, the shipping containers concept also allows multi-storey arrangements.

Rail Overbuild

Type: **Concept**

Credits:

Sheppard Robson



The housing shortage has led us to investigate building over transport infrastructure to stitch together disjointed areas of London. The concept is part of our ongoing research into MMC and off-site manufacturing. This has been developed on a series of sites, with the benefits of MMC and prefabrication including self-supporting structural components, reduced depth of structural “boxes”, enhanced acoustic performance and vibration isolation, and shorter construction programmes.

Definitions

Affordable rent

The definition of ‘affordable rent’ has been set at national level in the National Planning Policy Framework as referring to rents that—along with some other conditions—are ‘at least 20 per cent below local market rents (including service charges where applicable)’. This type of housing is let by local authorities or housing associations to people who are deemed eligible, according to a benchmark of local incomes and local house prices. In London, the Mayor has recognised that as rents are generally much higher than other parts of the country, the ‘affordability index’ means that 80 per cent of market rents are simply out of the reach of many as both rental and sale prices have rocketed across the capital. For this reason, the Housing Strategy states that ‘the Mayor encourages rents significantly lower than 80 per cent of the local market rent’.

Community Land Trust

A community land trust (CLT) is a not-for-profit organisation that is made up of community members. CLTs are a way for communities to build, bring back into life or protect buildings and services that are important to them.

Energy Performance Certificates

Energy performance certificates (EPCs) are a rating scheme to summarise the energy efficiency of buildings. The building is given a rating between A (Very efficient) – G (Inefficient). The EPC will also include tips about the most cost-effective ways to improve the home energy rating.

Intermediate rent

A subcategory of ‘affordable rent’. It is defined in both mayoral and national policy as a home with a rent set above that of social housing but below 80 per cent of the market equivalent (i.e. the central government definition of ‘affordable’). This category has gained greater currency in the light of economic arguments for London being able to maintain its global competitiveness and status by retaining highly skilled workers on lower-middle to middle incomes.

Community Infrastructure Levy (CIL)

The Community Infrastructure Levy is a charge which can be levied by local authorities on new development in their area. It is an important tool for local authorities to use to help them deliver the infrastructure needed to support development in their area.

Home-working / Working from Home

Home-working is when an employee works from their house, apartment, or place of residence, rather than working from the office.

Joint Venture

A property joint venture (JV) is an arrangement between two or more parties where value is created from the development, acquisition and/or management of a property. This alternative property investment enables experienced investors to work alongside property developers to combine capital with industry expertise. Joint ventures can take many forms. From an alliance, or agreement to cooperate, formal frameworks and contractual joint ventures, to separate corporate vehicles.

Co-living

Co-living is the practice of living with other people in a group of homes that include some shared facilities. These shared facilities can include amenities such as workspaces, gyms and laundries and is a popular typology for young professionals.

Decent Homes Standard

The Decent Homes Standard has played a key role in setting the minimum standards that social homes are required to meet since the early 2000s and is a legal standard that regulates housing. The Decent Homes Standard is currently only applicable to the social rented sector. A Decent Homes Standard in the private rented sector went out to consultation in the Autumn of 2022.

Intergenerational Living

Intergenerational living is based on the idea that residents of different generations, such as school age children, young adults and older residents, live together and share resources, skills, support and their time.

Leasehold Reform

On 21 December 2017 the Government announced plans to tackle the growing problem of newly built houses sold as leasehold rather than freehold, and to limit ground rents on new lease agreements. Some leaseholders are having to manage escalating ground rents making it harder for them to re mortgage or sell their home.

London Affordable Rent

A subcategory of ‘affordable rent’, specific to London and introduced in 2018 by the Mayor, who ‘does not consider 80 per cent of market rents to be genuinely affordable to Londoners on low incomes in most parts of London’. Instead, this definition, as used in the Mayor’s Affordable Homes Programme, is defined as homes aimed at low-income households, with caps on rents based on social rent levels.

Modern Methods of Construction (MMC)

Modern methods of construction is a process which focuses on off-site construction techniques, such as mass production, factory assembly and modular building, as alternatives to traditional building.

Passivhaus

The Passive House is not an energy standard but an integrated concept assuring the highest level of comfort within buildings. The exact definition is as follows: “A Passive House is a building, for which thermal comfort (ISO 7730) can be achieved solely by post-heating or post-cooling of the fresh air mass, which is required to achieve sufficient indoor air quality conditions – without the need for additional recirculation of air.”

Private rental sector (PRS)

The Private Rented Sector (PRS) is a classification of housing in the UK. The basic Private Rented Sector definition is: property owned by a landlord and leased to a tenant. The landlord, in this case, could be an individual, a property company or an institutional investor. The tenants would either deal directly with an individual landlord, or alternatively with a management company or estate agency caring for the property on behalf of the landlord.

London Living Rent

Another subcategory of ‘affordable rent’ specific to London, tied to local conditions and introduced by the Mayor, referring to homes that are offered at below market rent levels to people on average incomes, enabling them to save for a deposit. Rent levels are set at one third of the average household in the local area.

NIMBY and YIMBY

NIMBY: Not in My Backyard is a colloquialism denoting opposition to new developments in the individuals local context. The opposite of which is YIMBY: Yes in My Backyard which defines an individual who supports new developments in their local area, especially in relation to housing provision.

Permitted Development Rights (PDR)

Permitted development rights are a scheme, created by the government, that allows a homeowner to extend and / or renovate their home without the need for a full planning application.

Renters Reform Bill

The Renters Reform Bill is a Bill to make provision changing the law about rented homes, including provision abolishing fixed term assured tenancies and assured shorthold tenancies. In May 2023 the Government brought the bill to parliament to begin scrutiny and propose changes.

Low Traffic Neighbourhoods (LTN)

A low traffic neighbourhood (LTN) is a scheme to reduce motor vehicle traffic on residential streets. This is done by minimising the amount of traffic that comes from vehicles using the streets to get to another destination, often referred to as ‘through-traffic’, with vehicle access to homes still being provided. This opens up networks of streets so people can safely travel through the area on foot, bicycle, by wheeling or by bus.

Opportunity Areas (OAs)

Opportunity Areas (OAs) are identified in the Mayor’s London Plan as key locations with potential for new homes, jobs and infrastructure of all types.

Post Occupancy Evaluation (POE)

Post Occupancy Evaluation (POE) is the process of obtaining feedback on a building’s performance in use after it has been built and occupied. POE collects information on building and energy use and user satisfaction, with the aim of aiding the understanding of how buildings are being used compared to their design intention.

Right to Buy

The right of most council tenants and some housing association tenants to buy their home at a discount, a policy introduced by the Housing Act 1980 by the Conservative government led by Margaret Thatcher.

Section 106

A Section 106 Agreement (S106 Agreement) is an agreement entered into between a local authority and a landowner and/or developer under section 106 of the Town and Country Planning Act 1990. The agreement will contain planning obligations which the local authority wish to secure, or which the developer wishes to offer, in return for planning permission being granted.

Small Sites Small Builders

Small Sites Small Builders is a programme run by the GLA to make more publicly owned small sites available to small developers, housing associations and community-led organisations.

Shared Ownership

A subcategory of 'affordable home', which is partly rented and partly mortgaged.

Special Purpose Vehicle (SPV)

A legal entity, usually a limited company, with defined, limited purposes. In the context of public housing, this term generally refers to the housing development companies set up by local authorities to commission and deliver new homes.

Social Housing / Social Rented

Homes provided for people on low incomes or with particular needs by public or third- sector bodies, usually councils or housing associations, at rent levels set by a national policy. Critically, it is intended for people on the lowest incomes who cannot pay rents without other government funding, such as housing benefit support. As housing expert Julia Atkins points out, the term social housing 'is now contaminated by reference to "affordable" rented and "intermediate" housing, whereby rents are lower than private-sector rents² but which are not necessarily affordable for households on very low incomes'.

Tenure

The way in which land or property is held or occupied. As the Mayor's Housing Strategy notes, London's housing is mainly characterised as one of three tenures: social rented, private rented and owner occupied.

Endnotes

- a** <https://data.london.gov.uk/blog/new-population-projections-for-london-building-on-the-2021-census/#:~:text=The%20three%20trend%20variants%20we,of%209.2%20to%2010.1%20million>
- b** <https://migrationobservatory.ox.ac.uk/resources/briefings/long-term-international-migration-flows-to-and-from-the-uk/>
- c** <https://data.london.gov.uk/housing/housing-in-london/>
- d** https://en.wikipedia.org/wiki/London_overspill
- e** [https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023#:~:text=Before%20the%20coronavirus%20\(COVID%2D19,the%20week%20before%20the%20interview](https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023#:~:text=Before%20the%20coronavirus%20(COVID%2D19,the%20week%20before%20the%20interview)
- f** <https://www.nomisweb.co.uk/datasets/c2021rm099>
- g** <https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/bulletins/educationenglandandwales/census2021#:~:text=Across%20England%20and%20Wales%2C%20there,when%20it%20was%2010.8%20million>
- h** <https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-headline-report/english-housing-survey-2021-to-2022-headline-report>
- i** <https://capitalletters.org.uk/helping-private-renters-avoid-housing-stress-in-london/>
- j** <https://data.london.gov.uk/housing/housing-in-london/>
- k** <https://www.schroders.com/en-gb/uk/individual/insights/what-174-years-of-data-tell-us-about-house-price-affordability-in-the-uk/>
- l** <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/privaterentalmarketsummarystatisticsinengland>
- m** <https://data.london.gov.uk/housing/housing-in-london/>
- n** <https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants>
- <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/bulletins/housingenglandandwales/census2021>
- https://www.london.gov.uk/sites/default/files/housing_research_note_5_-_intermediate_housing_the_evidence_base.pdf
- <https://www.gov.uk/government/statistical-data-sets/live-tables-on-affordable-housing-supply>
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1088477/EHS_2020-21_Owner_Occupier_Leaseholders_Report.pdf
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1000052/EHS_19-20_PRS_report.pdf
- o** <https://www.gov.uk/government/statistical-data-sets/live-tables-on-net-supply-of-housing>
- p** <https://data.london.gov.uk/housing/housing-in-london/>
- q** <https://hansard.parliament.uk/commons/1960-03-17/debates/799bb688-5435-458f-a37f-10d6ae85e2de/Housing>
- r** <https://www.london.gov.uk/programmes-strategies/housing-and-land/homes-londoners-affordable-homes-programmes/homes-londoners-affordable-homes-programme-2021-2026>
- s** <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2022>
- t** <https://apps.london.gov.uk/public-land/?>
- u** <https://www.localis.org.uk/research/public-rental-homes/>
- v** <https://www.londonclt.org/citizens-house>
- w** <https://www.london.gov.uk/small-sites/making-small-sites-available-small-builders>
- x** <https://www.eastwickandsweetwater.co.uk/clt-registration/>
- y** <https://www.london.gov.uk/press-releases/mayoral/mayor-hails-success-of-right-to-buy-back>
- z** https://www.london.gov.uk/sites/default/files/build_to_rent_development_research_september_21_0.pdf
- aa** <https://staging.nakedhouse.org/>
- ab** <https://www.pocketliving.com/projects>
- ac** <https://www.gov.uk/government/publications/a-decent-home-definition-and-guidance>
- ad** <https://www.fitwel.org/resources/p/fitwel-v2-reference-guide-for-multifamily-residential-1>
- ae** <https://www.london.gov.uk/press-releases/mayoral/mayor-demands-social-housing-step-change>
- af** <https://www.london.gov.uk/mayor-london-calls-national-action-new-analysis-reveals-private-landlords-receiving-billions-pounds>
- ag** <http://www.iglooregeneration.co.uk/footprint/>
- ah** <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>
- ai** <https://www.ft.com/content/4c83a869-9606-4478-b794-8621ad59ce1>
- aj** <https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/londons-opportunity-areas>
- ak** <https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/londons-opportunity-areas/oa-residential-dashboards>

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1119761/Live_Table_122.ods
- al** <https://www.golf.org/framework/>
- am** <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/householdandresidentcharacteristicsenglandandwales/census2021>
- an** https://www.businessldn.co.uk/sites/default/files/documents/2023-04/BLDN_Report_BTL%20London%202023_0.pdf
- ao** <https://tendegreescroydon.co.uk/>
- ap** <https://pdf.euro.savills.co.uk/uk/residential---other/savills-co-living-spotlight---q2-22.pdf>
- aq** <https://www.architectsjournal.co.uk/news/hawkinsbrowns-battersea-co-living-scheme-rejected>
- ar** <https://irwinmitchell.turtl.co/story/unlocking-potential-for-senior-living/page/1>
- as** <https://www.tonichousing.org.uk/tonicatbankhouse>
- at** https://www.workhomeproject.org/documents/1/WORKHOME_SPACE_STANDARDS_Holliss-Barac-LondonMet.pdf
- au** <https://www.architectsjournal.co.uk/news/gove-mandates-two-staircases-for-all-new-high-rise-housing-over-18m> Accessed on 31/07/2023
- av** <https://researchbriefings.files.parliament.uk/documents/SN02110/SN02110.pdf>
- aw** <https://capitalletters.org.uk/about-us/>
- ax** <https://thedavidsonprize.com/awards/2023/more-not-less-2>
- ay** <https://www.gov.uk/guidance/guide-to-the-renters-reform-bill>
- az** <https://www.queenelizabetholympicpark.co.uk/-/media/chobham-manor-phase-1-poe-revised-version.ashx>
- ba** <https://www.designforhomes.org/>
- bb** <https://goodhomes.org.uk/>
- bc** <https://housingforum.org.uk/>
- bd** <https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings>
- be** <https://www.londoncouncils.gov.uk/node/38961>
- bf** <https://www.leti.uk/>
- bg** https://www.eci.ox.ac.uk/research/energy/downloads/40house/background_doc_K.pdf
- bh** <https://proctorandmatthews.com/project/james-riley-point>
- bi** <https://www.businesswire.com/news/home/20220824005191/en/Central-London-Office-Availability-up-51-to-Highest-Level-in-More-Than-15-Years>
- bj** <https://www.epr.co.uk/news/epr-to-convert-tfls-former-broadway-hq-into-hotel-1/>
- bk** <https://televisioncentre.com/>
- bl** <https://www.populoliving.co.uk/populo-in-newham/town-hall-annexe/>
- bm** <https://suttonhousingsociety.org.uk/about-us/new-homes/>
- bn** <https://skyroom.london/>
- bo** <https://www.repowering.org.uk/>
- bp** https://www.passivhaustrust.org.uk/what_is_passivhaus.php
- bq** <https://cip.camden.gov.uk/agar-grove>
- br** https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/nearly-zero-energy-buildings_en
- bs** <https://www.myenergi.com/>
- bt** <https://www.powervault.co.uk/>
- bu** <https://www.wickcdt.org/circular-economy-hub/>
- bv** https://www.london.gov.uk/sites/default/files/2023-03/GLA%20Capital%20Funding%20Guide%20Section%202%20-%20General_1%20Mar%202023.pdf
- bw** <https://kb.goodhomes.org.uk/wp-content/uploads/2020/05/Circular-economy-strategy.pdf>
- bx** <https://www.farrellcentre.org.uk/>
- by** <https://www.commonplace.is/>
- bz** <https://www.thamesmeadnow.org.uk/the-plan/#:~:text=Peabody's%20Plan%20for%20Thamesmead%20describes,setting%20five%20goals%20to%20achieve.>
- ca** <https://www.populoliving.co.uk/the-carpenters/community-wealth-building/>
- cb** <https://befirst.london/project/a-house-for-artists/>
- cc** https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907203/The_Value_and_Incidence_of_Developer_Contributions_in_England_201819.pdf
- cd** <https://www.constructionnews.co.uk/buildings/minister-moots-prosecution-over-dangerous-camden-block-23-05-2023/>
- ce** <https://talk.towerhamlets.gov.uk/code-of-construction-practice>
- cf** <https://www.ft.com/content/4c83a869-9606-4478-b794-86211ad59ce1>
- cg** <http://www.high-rise-housing.co.uk/>
- ch** <http://www.high-rise-housing.co.uk>

Further Reading

- Bourne, J., Ingianni, A. and McKenzie, R. (2023). What's in the laundromat? Mapping and characterising offshore-owned residential property in London. Sage Journals. Available at: <https://journals.sagepub.com/doi/10.1177/23998083231155483>
- Business LDN. (2022). The Case for Private Investment into Affordable Housing in London. Available at: https://www.businessldn.co.uk/sites/default/files/documents/2022-10/BLDN_Report_Affordable%20Housing_1.pdf
- City of Toronto. (2020). Planning for Children in new vertical communities. Available at: <https://www.toronto.ca/legdocs/mmis/2020/ph/bgrd/backgroundfile-148362.pdf>
- Cottell, J, Harding, C., Mahmud, Z. and Tabbush, J. (2023). Homes fit for Londoners: London's homes today. Centre for London. Available at: <https://centreforlondon.org/wp-content/uploads/2023/08/Centre-for-London-Homes-fit-for-Londoners-Londons-homes-today.pdf>
- Dunning, R and Moore, T. (2020). Defining and measuring empty and under- utilised dwellings in London. University of Liverpool with Dataloft. Available at: https://livrepository.liverpool.ac.uk/3144868/1/defining_and_measuring_empty_and_under-utilised_dwellings_in_london.pdf
- Future of London. (2023). Affordable housing: Overcoming crisis through collaboration. Available at: <https://www.futureoflondon.org.uk/knowledge/completed-projects/affordable-housing-crisis/>
- Greater London Authority. (2021). Housing in London 2021. Available at: https://www.london.gov.uk/sites/default/files/housing_in_london_2021_v2.pdf
- Jessel, E. (2023) Gove mandates two staircases for all new high-rise housing over 18m. Available at: <https://www.architectsjournal.co.uk/news/gove-mandates-two-staircases-for-all-new-high-rise-housing-over-18m> Accessed on 31/07/2023
- Mayor of London. (2018). Building Council Homes for Londoners. Greater London Authority. Available at: https://www.london.gov.uk/sites/default/files/building_council_homes_for_londoners_16_may.pdf
- Mayor of London. (2018). London Housing Strategy. Greater London Authority. Available at: https://www.london.gov.uk/sites/default/files/2018_lhs_london_housing_strategy.pdf
- NLA. (2015). New ideas for housing. Available at: <https://nla.london/insights/new-ideas-for-housing>
- NLA. (2018). Factory-made housing: a solution for London?. Available at: <https://nla.london/insights/factory-made-housing-a-solution-for-london>
- NLA. (2019). Public Housing: a London Renaissance. Available at: <https://nla.london/insights/public-housing-a-london-renaissance>
- NLA. (2020). The changing face of London. Available at: <https://nla.london/insights/the-changing-face-of-london>
- NLA. (2021). London Tall Buildings Survey 2021. Available at: <https://nla.london/insights/londons-tall-buildings-survey-2021>
- NLA. (2022). London Tall Buildings Survey 2022. Available at: <https://nla.london/insights/london-tall-buildings-survey-2022>
- NLA. (2023). London Tall Buildings Survey 2023: Sustainable Skylines. Available at: <https://nla.london/insights/london-tall-buildings-survey-2023-sustainable-skylines>
- Quality of Life Foundation and the Department for Levelling Up, Housing and Communities. (2023). Review of Post-Occupancy Evaluation for Housing. Available at: <https://www.qof.org/wp-content/uploads/Post-occupancy-evaluation-for-housing-review.pdf>
- Real Worth and Trowers and Hamblins. (2018). The Real Value Report. Available at: <https://www.trowers.com/-/media/files/thought-leadership/real-value-report/the-real-value-report---full-report-digital.pdf>

ONLINE RESOURCES

[Datastore](#) ↗

[Housing Zones](#) ↗

[London Rent Map](#) ↗

[Smalls Sites](#) ↗

Acknowledgements

NLA would like to thank our Principal Partners, Champions and contributors whose support made this study possible.

Special thanks to the following people for sharing their time, expertise and insights, and their own research, via interviews, discussions and/or participation in NLA workshops →

With thanks to **Claire Bennie**, researcher of the NLA report Housing Londoners

Editor:
Federico Ortiz, Ellie Davies

Design:
Ruby Bergin

Marketing and communications:
Chris Forsdike

Sarah Allan,
DLUCH

Marion Baeli,
PDP

Rachel Bagenal,
Hackney Council

Mark Baigent,
London Borough of
Redbridge

Chris Bailey,
Action on Empty
Homes

Philippa Bancroft,
Greater London
Authority -
Small Sites

Simon Bayliss
HTA

Rory Bergin,
HTA

Anna Blandford,
LB Haringey

Kyle Buchanan,
Archio

Oliver Bulleid,
London CLT

Jenny Buterchi,
PRP

Mark Byles,
Newsteer

Jennie Coombs,
Be First

Irene Craik,
Levitt Bernstein

Alison Crompton,
AECOM

Jennifer Daothong,
London Borough of
Lewisham

Marcus Dixon,
JLL

Tom Dollard,
Pollard Thomas
Edwards

Melissa Dowler,
Bell Phillips

Dan Epstein,
Useful Simple Trust

Robert Evans,
Argent

Vikki Everett,
Westminster City
Council

Rachel Ferguson,
Pocket Living

Fiona Fletcher-Smith,
L&Q

Ciaran Garrick,
Allies and Morrison

Tom Goodall,
Related Argent

Michael Gozo,
Greater London
Authority

James Green,
City of Westminster

Alice Hawkins,
Turley

Sogand Howard,
Greater London
Authority - Small Sites

John Howard,
Commonplace

Tina John,
Pocket

Arthur Kay,
Skyroom

Lizzie Le Mare,
Tibbalds

Alice Lester,
London Borough of
Brent

John Lewis,
Peabody

James Lord,
HTA

Miranda MacLaren,
Morris+Company

Viviana Magnarin,
HTA

Victoria Manston,
HUB Residential

Amena Matin,
London Borough of
Enfield

Andrew Matthews,
Proctor and Matthews

Oliver Maury,
Montagu Evans

Jo McCafferty,
Levitt Bernstein

Gary McLuskey,
Greystar

Trevor Morriss,
SPPARC

Clive Nichol,
Fabrix

Darren Parker,
L&Q

Rahul Patalia,
WSP

Polina Pencheva,
Morris + Company

Isabel Pietri,
Lendlease

Dan Rea,
Periscope

Sarah Beth Riley,
Be First

Mariana Schiller,
Greater London
Authority

Selasi Setufe,
Be First

**Amandeep Singh-
Kalra,**
Be First

Jonathan Smales,
Human Scale

Jamie Smith, Related
Argent

Sharon Strutt,
London Borough of
Redbridge

Linda Thiel,
White Arkitekter

Prisca Thielmann,
Maccreeanor Lavington

Kathryn Tombling,
BDP

Chris Twinn,
LETI

Carl Vann,
Pollard Thomas
Edwards

Peter Vernon,
Grosvenor Hart Homes

Matt Watts,
Reed Watts

Andrew Waugh,
Waugh Thistleton

Mark Wilkinson,
Hoare Lea

Jacob Willson,
Be First

Stephen Workman,
Atkins

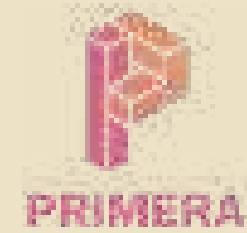
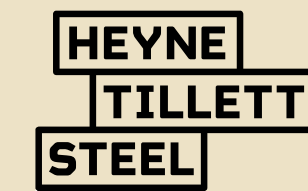
Elizabeth Wright,
Muse

Ian Yenney,
AECOM

NLA Principal Partners



NLA Champions





NLA is London's built environment community; a membership organisation for everyone with an interest in London's built environment. Its purpose is to help make London a better place to live, work and visit. Its mission is to engage with professionals, politicians and the public to deliver positive change in the city.

NLA's activities include events, exhibitions, tours, research, publications, learning, websites and social media, awards and competitions, as well as the London Festival of Architecture. NLA's public gallery and event space, the London Centre, is based in the City of London and hosts its London Models.

[Join our community today ↗](#)

NLA

nla.london ↗

info@nla.london ↗

+44 (0)207 636 4044

 @nlalondon

 @nlalondon

 NLA

The London Centre
3 Aldermanbury
London EC2V 7HH

thelondoncentre.org ↗

Principal Partners

