WE CAN MAKE

NEW HOUSING FUTURES

PLAYBOOK
WeCanMake is a community land trust and neighbourhood test-space in Bristol, imagining and making new ways to create homes that build social infrastructure and community wealth.

This Playbook sets out our working prototype for unlocking micro-sites for affordable community-led homes, and shares how the approach could be replicated and scaled across the UK.
1. WHAT THE PLAYBOOK IS AND HOW TO USE IT  
   PG.04
2. FROM SYSTEM FAILURE TO FINDING A NEW STORY ABOUT HOUSING  
   PG.08
3. A WORKING PROTOTYPE FOR DOING HOUSING DIFFERENTLY  
   PG.15
4. MAKING HOMES AS SOCIAL INFRASTRUCTURE  
   PG.28
5. THE POWER OF SMALL... SCALING WECANMAKE  
   PG.34
WHAT THE PLAYBOOK IS AND HOW TO USE IT
We are in a housing crisis. There is an urgent need for new ideas about the change that is needed and how we make it happen – both in policy terms and how it gets delivered on the ground.

This Playbook shares our community’s creative response to the crisis. It is an open exploration of the legal, financial and regulatory complexity of how we currently do housing. It is about how those systems and assumptions can be positively re-wired, and how our community, working from the ground up, sparked a glimmer of what a better future could look like.

Above all, it is a story about place-led innovation: operating at a hyper-local level with embedded relationships of trust at the family, neighbourhood, and council level; using the knowhow and assets to hand; pulling in diverse tech and tools to tackle the issues the community cares about; and workingdurationally (and tenaciously) to see change through with the people who have the highest stake in creating that better future.

So far, WeCanMake has delivered two community-led, low-carbon, locally made, Living Rent homes in Knowle West, with the land and homes held in trust for community benefit in perpetuity. But this Playbook is about much more. Our two homes are a practical demonstration of a new replicable model for community-led opt-in densification, that unlocks an additional supply of land enabling those in housing need to create affordable homes precisely where they are needed most.

**SCALE AND IMPACT**

There are many other neighbourhoods across the UK and beyond experiencing similar challenges to ours. What we have found and made in Knowle West is designed to be open for others to adapt and adopt for their own context. WeCanMake shows how communities and neighbourhoods can open up different routes to scale and impact: where aggregate numbers are realised through multiple, distributed and diverse communities using a common set of tools and methods to deliver development on their own terms.

Across England, there are 1.1 million council-built interwar homes similar to those in Knowle West in terms of density. An equivalent level of opt-in gentle densification achievable in Knowle West (around 3% intensification of the existing urban fabric) could mean an additional 33,000 affordable homes across England. Each home could be added precisely where it is needed most, enabling elders to downsize but stay in their community, and easing over-crowding in households where adult children need a place of their own.

In Chapter 5 we make six key policy recommendations to help make that process of scaling and replication easier. Throughout the Playbook you will find live links to a series of Fieldnotes and other resources that contain further information about the research and methods that inform the model.

FIND OUT MORE ABOUT SCALING WE CAN MAKE AND HOW TO UNLOCK 33,000 ADDITIONAL AFFORDABLE HOMES.
OUR NEIGHBOURHOOD TEST-SPACE – OUR PILOT – PAVES A WAY FOR OTHER COMMUNITIES TO DO WHAT WE HAVE BEGUN TO DO IN KNOWLE WEST.

AND THAT’S WHERE YOU COME IN.

NEIGHBOURHOODS AND COMMUNITIES

We believe the “neighbourhood” is a key site within which to seed and grow social and economic change. We want to connect with other communities and neighbourhoods experiencing similar challenges to ours, with whom we can share learnings from our experiment and tools that others may find useful when it comes to meeting diverse housing needs. Neighbourhoods may want to adapt and adopt some or all of the WeCanMake tools and methods for their own context. This is an open invitation to get involved in the next stage of the neighbourhood test-space as we develop a new peer network for collectively imagining and making better housing futures for people and places.

LOCAL AND REGIONAL DECISION MAKERS

Communities have significant place-based assets and knowhow that can bring fresh energy to help address the housing crisis.

Local and metro authorities can play a vital role in creating fertile ground for housing innovation through their openness to community-led activity and ideas on issues such as planning, land disposal, and housing allocations. WeCanMake worked collaboratively and creatively with Bristol City Council in developing its prototype, achieving together what neither could have done alone. We want to connect with other local and regional decision-makers to share our learning around nurturing the right conditions for community-led housing innovation to flourish.

FIND OUT WHAT WE’VE BUILT TOGETHER IN SECTION 4 →

FIND OUT HOW WE’VE WORKED WITH THE COUNCIL IN OUR FIELDNOTES →

NATIONAL DECISION MAKERS AND SHAPERS

WeCanMake’s early success shows how motivated communities and councils working together can positively re-wire the existing housing system to better meet people’s housing needs. However, some of the steps behind the model are unnecessarily slow and difficult and are holding communities back from building the homes they urgently need.

WeCanMake invites national decision-makers and shapers to connect and explore how greater recognition of and investment in the community sector at a policy, funding, and infrastructure level could significantly help diversify housing supply, raise quality, and generate longer-term value for people and places.

VISIT THE POLICY SECTION OF THE PLAYBOOK FOR MORE INFORMATION →
7 WAYS TO MAKE GOOD HOMES

THE WECANMAKE PROTOTYPE

1. ENABLE GENTLE DENSIFICATION
   Establish a people-led process of gentle densification as an alternative to greenfield sprawl and high-rise towers. Make use of neglected back gardens and left-over spaces between buildings to adapt and enhance the capacity of the existing urban fabric to create space for new homes.
   READ MORE IN SECTION 3-1 →

2. BUILD HOMES AT POINT OF NEED
   People in housing need can opt-in to use the resources they do have access to – land – in a new way to create affordable homes precisely where they are most needed. For example, for elders who want to downsize but stay in the community, or easing overcrowding in households where adult children need a place of their own.
   UNDERSTAND MEETING HOUSING NEEDS IN SECTION 3-2 →

3. CREATE A NEW SUPPLY OF LAND
   The innovative land assembly model unlocks micro-sites in low density neighbourhoods. Land assembly and planning consent are conditional on the land and homes being owned by the community, and affordable in perpetuity. This creates a new supply of land in the form of CLUES – Community-Led Urban Exception Sites.
   READ MORE IN SECTION 3-3 →

4. EMPOWER THE COMMUNITY TO SET THE RULES
   The community positively sets the rules for what gets built through a Community Design Code, ensuring homes are high-quality and add character to the neighbourhood.
   READ MORE IN SECTION 3-4 →

5. MAKE LOW CARBON HOMES LOCALLY
   Use Modern Methods of Construction to localise the production of homes. This ensures the homes are low carbon and enable the community to retain more of the value of development in the form of local jobs, skills and tech infrastructure.
   GET TO KNOW MMC MORE IN SECTION 3-5 →

6. DEFINE AFFORDABILITY IN TERMS OF INCOME
   Our Living Rent policy sets the rent at no more than one-third of average neighbourhood household income, ensuring the homes are genuinely affordable for local people.
   READ MORE IN SECTION 3-6 →

7. MEASURE WHAT MATTERS
   Our Good Home Social Value Framework provides a way for the community to decide, prioritise, measure, and communicate what matters most when new development happens in their area. This means valuing housing not just as a financial product or by the number of units delivered, but more about how new homes quantifiably contribute to creating local jobs, reducing loneliness, fostering pride of place, and tackling the climate emergency.
   READ MORE IN SECTION 3-7 →
FROM SYSTEM FAILURE TO FINDING A NEW STORY ABOUT HOUSING
SYSTEM FAILURE

Home is the first infrastructure of everyday life: home is shelter, safety, and stability. Yet for a growing number of people this infrastructure is crumbling, out of reach, or missing altogether.

UNAFFORDABLE HOMES

Homes are more unaffordable than they have ever been. In the 1950s the average person spent more on clothes than on housing each month. In 2021, the UK House Price to Income Ratio reached its highest ever level, with fulltime employees typically expected to spend around 91 times their workplace earnings to purchase a home in England.

MISMATCH BETWEEN SUPPLY AND ACTUAL NEED

Council house waiting lists have never been longer; with over 1.2 million households registered, and one in 10 households stuck on the list for over five years. To meet demand, it is estimated that 300,000 new homes are needed across England every year, of which around 145,000 should be affordable. However, there is a chronic undersupply of genuinely affordable homes. A total of 216,000 new homes were supplied in 2020/21, but only 57,417 (26.5%) of these were classed as ‘affordable’, and of these just 6,239 (2.8%) were for social rent.

HOMES UNFIT FOR HABITATION

With the oldest housing stock in Europe, the UK has chronic problems with damp and poor insulation. Moreover, the market is failing to deliver new homes that are able to meet new challenges caused by the climate emergency. For example, just 2% of new homes delivered in England and Wales in the second quarter of 2021 were built to the highest energy efficiency standards.

HOUSING ISOLATED FROM WIDER SOCIETAL NEEDS

Housing delivery tends to operate in a silo, disconnected from wider societal needs and challenges. This is despite evidence of the wider impact of poor housing. One study calculated poor housing is costing the NHS £1.4 billion a year through impacts such as exposure to excess cold. A major shift is required to create homes that are delivered in a way that address the wider set of structural challenges facing people and places, including the ecological and climate emergency, the loneliness epidemic, and rapid technological change.

AN EXTRACTIVE INDUSTRY

The UK housing industry is dominated by the “Big 6” developers, all of whom are making record profits while at the same time, lobbying for environmental standards to be weakened, and taking taxpayer subsidies through government schemes like Help to Buy.
Knowle West is a working-class neighbourhood in Bristol. When it was first conceived almost 100 years ago it was seen by many as the future of housing. It was part of a wave of 1.1 million council homes built in the interwar era, instigated by a collective moral imperative to build “homes fit for heroes” after The Great War. In Knowle West, this was interpreted as solid semi-detached red brick homes set in generous gardens.

We are told our failing housing system is paralysed with no hope for any progress... We are told that communities only mobilise as perpetual NIMBYs (Not In My Back Yard) to resist new development... We are told only big commercial developers can deliver at the speed and scale needed to tackle a crisis this vast...

But what if we stopped looking for answers for how to fix the housing crisis inside the very system that created it in the first place?

WHAT IF THE POWER AND RESOURCES TO CREATE GOOD HOMES WERE IN THE HANDS OF COMMUNITIES?

A CENTURY LATER, KNOWLE WEST MAY BE THE FUTURE OF HOUSING AGAIN. BUT THIS TIME TELLING A NEW STORY ABOUT HOW A CREATIVE, COMMUNITY-LED, ASSET-BASED APPROACH CAN HELP US RE-IMAGINE AND RE-MIX HOW WE DO HOUSING TO BETTER MEET THE NEEDS OF PEOPLE AND THE PLANET.

WeCanMake has a people and place-led approach to housing innovation. Embedded in Knowle West, our mission has been to create a neighbourhood test-space within which to collectively imagine and actively anticipate new community-led ways to do housing. This means more than just generating speculative ideas about how things could be better. It means prototyping, growing and making to spark glimmers, so that people can see how these new possibilities might work.

The rest of this chapter shares WeCanMake’s approach to creating our neighbourhood test-space.
Outsiders often look at “left-behind” places like Knowle West – with high levels of disadvantage and underinvested public realm – and deem them in need of being fixed, transformed, or even demolished and started again. We take a different approach: we focus on what’s strong, not what’s wrong. Rather than wholesale demolition or transformation, we believe Knowle West and many places like it already have most of the assets and knowhow they need. The creative and collective challenge is how to best tease out those powerful community strengths, identify the challenges and opportunities, and then develop the means to make what is needed to fill the gaps.

People and places hold wisdom and knowledge accumulated over generations. This is a rich resource and it is vital that community members are valued as experts with experience who can collaborate on equal terms with other experts – from engineers to policymakers. WeCanMake has a low floor/high ceiling ethos, which means making it easy for people to step in and start making a meaningful contribution, with no limit on how lengthy or sophisticated their contribution might become. We have found that working in this way is more inclusive and can produce unexpected ideas of what positive change looks like.

Focus on what’s strong, not what’s wrong

What we would love to see in Knowle West!
Human beings are fundamentally makers, and it is through our material creations – from our finest arts to everyday objects – that we communicate and connect with each other while manifesting and embedding meaning. Humans also tend to talk more openly when their hands are busy, and the collective agency generated through the craft and graft of making together takes some beating. The practical tools of everything from film, photography, to crafts, and digital fabrication aid both the creative process of imagining how things could be, and also creating glimpses of those better futures on the ground.

In our highly centralised political system and resource-stretched times, there can be a tendency to assume power dynamics between communities and councils operate as a zero-sum game – if one gains the other must automatically lose out, and where the sharing of resources is run as a top-down exercise. A more sustaining mindset lies in recognising that communities and councils bring different kinds of assets and knowhow to the table, and with trust and the right choices, they can achieve together things that neither could do by working alone. Finding the common ground means identifying the overlapping missions and the kinds of value or outcomes that both community and council want to see. Presenting change as an experiment can be easier to negotiate through the system, though care must be taken to ensure that change is cumulative and creates pathways, rather than being treated as a one-off. Things only ever move at the speed of trust, and sometimes a slower path can lead to a better outcome.
Alongside imagining bold futures, we have been careful to also seek out the practical, discretionary spaces for innovation that exist within the current system.

These opportunities for change are often hidden in the gaps, the details, and the assumptions of current legal, financial and regulatory rules and norms. But these gaps can sometimes offer the beginning of an opening to a better future. Frugal innovation is born from ingenuity and the necessity of working with what you’ve got, and as such, we structured our neighbourhood test-bed as a series of minimum viable experiments exploring how we currently do housing and how we could do housing in the future.

Small-scale experiments mean that risks are lower, we can be diverse, build a strong sense of ownership, learn from successes and failures, and bank what works to make real change happen.
A WORKING PROTOTYPE FOR DOING HOUSING DIFFERENTLY
Getting our housing system to deliver the genuinely affordable, green, good-quality homes that people and community need can feel like a tall order. Communities feel under siege from top-down commercial development, and local authorities are stymied from demanding better due to complexity and a lack of resources.

Our neighbourhood test-space shows that it is possible to seed radical change within the existing system. Nothing WeCanMake has done has required new policy or regulation. Within existing frameworks, we have created a new supply of land, charted a new route through the planning system, and developed a new way to diversify and localised the production of new homes and put them precisely where people want and need them most.

Here we share the ingredients that make up our working prototype. This isn’t offered as a one-size-fits-all fix, but more of a modular menu from which others may choose elements to adapt and adopt for their own context – whether they be another community in housing need, or a local authority wanting to embrace innovative tactics and tools.
WECANMAKE: INGREDIENTS FOR UNLOCKING MICRO-SITES

1. ENABLE GENTLE DENSIFICATION
2. BUILD HOMES AT POINT OF NEED
3. CREATE A NEW SUPPLY OF LAND
4. EMPOWER THE COMMUNITY TO SET THE RULES
5. MAKE LOW CARBON HOMES LOCALLY
6. DEFINE AFFORDABILITY IN TERMS OF INCOME
7. MEASURE WHAT MATTERS
House-building programmes tend to rely on either consuming greenfield land on the edge of towns and cities, or top-down demolition and densification, with the loss of existing urban communities and their replacement with taller, denser new builds. We think this is a false choice and there are other ways to make space for good homes. In lower-density neighbourhoods like ours, there are often spaces hidden in between buildings and in large back gardens where new homes could be added. We describe this process of gentle densification as 'urban acupuncture’, adding homes precisely where people need them most and in a way that creates ripples of value for the wider neighbourhood.

The business-as-usual approach to housing provision can leave people feeling they have little choice or agency over their options. Our process of gentle densification works with the resources people do have access to (land), and is an opt-in process. For example, an elder may wish to downsize but stay in their community, a family may be experiencing overcrowding, or there may be someone who needs some care but wants to retain their independence.

So far, we have tested the model with council tenants – people who are often in highest housing need – but also conventionally perceived as having the least resources with which to improve their situation. We think the model could work for other tenures, providing an alternative route to a secure and affordable home. Over 80 families in Knowle West have registered their interest in using their land in this way for a WeCanMake home so far. One of the eligibility criteria for opting in is that the future resident of the home must be registered on the Council’s housing waiting list, which helps ensure prioritising those in highest need.
ADAPT AND DENSIFY

POTENTIAL
In Knowle West South Bristol

VIABLE
5,000 homes in Knowle West

1500 MICRO-SITES
Potential micro-sites across the neighbourhood of 5,000 homes, where an additional one or two bedroom home could fit.

150 HOMES
This represents developing 10% of the potential micro-sites across the neighbourhood and a 3% intensification of the existing urban fabric.

Increasing housing supply in neighbourhoods like Knowle West conventionally often defaults to top-down demolish and densify tactics. This approach is wasteful in terms of embodied carbon, and costly in relation to the social infrastructure of people and places that has built up over many years.

WeCanMake have identified over 1,500 potential micro-sites across Knowle West where a one- or two-bedroom home could fit. Our analysis indicates that the existing urban infrastructure could take an additional 150 homes, representing 10% of the potential micro-sites available and a 3% intensification of the overall neighbourhood.

This assessment is based on the level of intensification that the existing urban fabric can support (identified through mapping, site visits, and extensive community engagement); the type and level of need where a home might be built (eg. Elders downsizing but staying in the community); and the viability of individual sites (access and levels mean that not all micro-sites are viable).

Unlocking micro-sites to facilitate opt-in infill development offers and gentler process of adapt and densify that is better able to engage, repair, and enhance the existing urban fabric in all its social, economic, and cultural richness.
The conventional development industry tends to treat land as a financial product to be flipped and traded for a profit. However, another way is possible. Public land (including local authority-owned land) that is valued at less than £2 million can be disposed of at less than “best consideration” market value. This unlocks a way to transfer land based on its wider and longer-term social value, rather than just its narrow financial value. Bristol City Council valued our first two micro-sites at £20,000 each and agreed to transfer the land to the WeCanMake community land trust at social value on a 125-year lease. This Social Value Lease represents five generations and helps foster long-term care and community benefit. This helps incentivise investment in the kind of build quality that gives back over the long run, including high-performance insulation and the integration of renewable energy supply. Combined with our innovative planning precedent, this land transfer process represents a new and additional supply of land that is exclusively for the community sector. The land assembly process has been verified at national level by the Secretary of State at the Department for Levelling Up, Housing and Communities (DLUHC). This substantially de-risked the model from a local authority perspective, anxious about the potential for future legal challenges. Being verified at national level also creates the opportunity for other neighbourhoods to replicate the approach. So far, the homes have generated over nine times that original land value in wider social value.

A) The micro-site land and home are held in community-ownership in perpetuity.
B) The home is affordable in perpetuity.

The first two WeCanMake homes were granted planning permission with these conditions, creating a positive and enabling planning precedent that other neighbourhoods can draw on. The precedent effectively operates as an urban accompaniment to Rural Exception Site Policy, which the National Planning Policy Framework defines as small sites used for affordable housing in perpetuity where sites would not normally be used for housing.
Design codes tend to be quite technical documents designed by and for built environment professionals. WeCanMake puts the community at the heart of making the rules, providing an alternative to feeling under siege from conventional top-down development processes.

Our Code sets out a positive framework for the kinds of homes the community would welcome in the neighbourhood, including number, location, size, materials and overall look. Overall, the Code makes it easier for people to navigate a complicated design and planning process, and ensure homes are high-quality and add character to the neighbourhood.

“‘It’s our community setting the rules – development we actually want to say yes to. We don’t have to be boring. Knowle West has got its own style, we’ve got flair. Why shouldn’t the houses that get built reflect that?’”  

KNOWLE WEST RESIDENT

MAKING THE COMMUNITY DESIGN CODE

An R&D crew of local people, artists and architects worked together to co-design the Code. Over a series of four months, the crew met, held creative workshops, went on neighbourhood tours, and visited other housing projects to get inspiration.

The emerging ideas and rules were shared and tested with the wider community and stakeholders through an exhibition and workshops. The team worked closely and collaboratively with the City Design Team in Bristol City Council to ensure the Code would work positively with current policy and practice.

The Code sets out a small number of mandatory “red line rules” that must be followed – these mainly relate to viability of the site to be able to accommodate a good home, and the environmental performance of the home. A larger set of guiding principles shape each home to ensure they are good for the resident, the wider neighbourhood and the planet, with examples of how to apply both the redlines and principles in practice. For example, how to ensure windows give enough light but maintain privacy.

The First Edition Code was tested through a Speed Planning Day, where teams of local families and architects were each tasked with using the Code to design a home and present their proposal to a mock Planning Committee.

The Design Code was then used to support the development of our first two homes through the design and planning process, and is now being used to guide the design and development of each new home. The Code is maintained as a live document, creating a growing pattern book of practical design approaches that work for micro-sites. WeCanMake is working with Bristol City Council to develop a Planning Practice Notice, which will recognise the Design Code approach as “process as policy”, and help ensure future planning submissions guided by the Code are treated in a consistent manner.

Overall, the Code helps communities feel in control, encourages design quality, builds confidence in the system, and speeds up the planning process.

SEE THE COMMUNITY DESIGN CODE ON OUR WEBSITE ➔
Nearly a fifth (4.8 million) of households in the UK face housing affordability issues. Part of the problem is that prevailing definitions of “affordable” are crudely market based. The default affordable rate remain out of reach for many, with the complex array of policies and products – including Affordable Rent Scheme, Help to Buy, First Homes, and the Mortgage Guarantee Scheme – often failing to close the gap.

There is growing recognition that a better threshold is to define affordability in terms of household income, rather than the market, whereby affordability is set as rent or purchase costs not exceeding one-third of household income. This income-linked threshold is known as Living Rent. For our WeCanMake homes, we have established a Living Rent Policy, whereby rents are capped at no more than one third of average net household income for the neighbourhood.

**Click here to read more info on the living rent**

The value of most new housing developments tends to wash through communities, as contracts and profits flow to large commercial developers whose headquarters are far from the places where their units are built. In contrast, WeCanMake works to make the value of new development stick to our local community by localising the production of the homes using new digital design and construction tools, known as Modern Methods of Construction (MMC).

We use timber cassette MMC systems that fit together a bit like LEGO. The parts are small enough to be made in our community micro-factory, and delivered to site for assembly by a team of local tradespeople.

Using this localised MMC approach means we can:

- Create local jobs and skills
- Prioritise low carbon materials, including integrating in re-use of local waste materials into the design and fit-out
- Customise the designs to fit the needs of future residents and complement the character of the neighbourhood
- Have the skills locally to maintain, repair and adapt the homes over time.

**Click here to find out how we use localised MMC to make low carbon homes and create community wealth**

We can make low carbon homes locally.
Modern Methods of Construction: A New Way to Build?

Modern Methods of Construction (MMC) is a catchall term that covers a lot of different kinds of products and technologies. It broadly means factory-based manufacturing and assembly of standardised parts for homes, which are then transported to site for final assembly.

As new MMC technologies enter the UK housing sector, there is an opportunity to diversify the housing supply industry and raise quality. The danger is that the arrival of MMC tech forges a development industry that is even more consolidated, centralised and distanced from the needs and aspirations of diverse people and places. So far, government enthusiasm for MMC has focused on its potential to deliver homes faster and cheaper by reducing labour costs through requiring fewer and less-skilled labourers on-site. But what if we chose to invest in the power of community-owned tech to create a different kind of future? What if these new tools could be distributed, diverse and in the hands of communities?

WeCanMake is excited about how new MMC tech and tools could help grow an infrastructure capability for communities to directly design, make and adapt their neighbourhood on their own terms, helping them to respond to changing needs over time – from climate impacts, to accommodating an ageing population.

Localising the production of homes using new digital design and fabrication technology enables our community to capture more of the value of new housing development by building community wealth in the form of new skills, jobs and infrastructure.

On the next two pages, we share how we use MC tools to localise the production of homes.
LOW WASTE
Combining digital design and a controlled factory environment creates efficiency and precision. The lean manufacturing process produces only 10-12% waste, all of which is recyclable. This compares to 30% waste in traditional construction, much of which goes to landfill.

LOW UP-FRONT CARBON
The structural cassettes are manufactured from 100% OSB from FSC certified forests in the UK and Northern Ireland. The cladding is UK larch, from forests in Yorkshire. The timber system helps reduce up-front carbon, generally saving 45% of carbon compared to a conventional masonry build.

CARBON LIGHT FOUNDATIONS
The lightweight system has eliminated the need for internal softwoods and supporting steels. This makes the building lighter and so requires smaller foundations (screw piles and concrete pads rather than large concrete slabs). This helps to reduce up-front carbon.

LOCAL CREW
Local people, including WeCanMake’s future residents have been trained to fabricate and assemble the cassettes in our community micro-factory. A crew of 20 local tradespeople were hired to install and fit out on site. This was everyone’s first experience of MMC.

LIGHT LOGISTICS
The timber cassettes – which fit together a bit like LEGO, are designed for human-powered lifting. They are small enough to fit in a transit van, and can be delivered and assembled on site without the need for large and expensive machinery.

LOCALISED MMC MEANS...

MADE TO LAST
Our first two homes were made using the BlokBuild MMC timber cassette system. BlokBuild is BOPAS accredited, which means the system is quality-assured at every stage, and the homes have a minimum 60-year lifespan – the same as a traditionally built home.

WeCanMake can manufacture locally under BlokBuild’s license, bringing the highest quality-assurance into our community micro-factory.
The future residents have been fully involved in the co-design, fabrication, and self-finish of their homes, including laying the floors and painting. This has helped develop a strong sense of ownership and pride.

Localising production makes it easier to customise the homes to reflect and enhance the character of the local area. For example, the larch cladding for the homes was CNC engraved with a herringbone pattern, echoing the brickwork pattern adorning the buildings on the nearby high street, Filwood Broadway.

The homes are triple-glazed and highly insulated. This fabric first approach minimises the need for heating and keeps the homes cool in summer.

The homes are 100% electric and powered with Photovoltaic Panels and Air Source Heat Pumps. These pumps are a kind of renewable energy technology that takes the warmth from outside (even when it's freezing) and use it to heat a home.

Both the WeCanMake home and host home are kitted out with bin and bike stores with an integrated green roof, and the gardens are planted with biodiverse herbs, shrubs and at least one tree.

Localised MMC is better able to integrate alternative materials into the construction by being plugged into localised supply-chains, including waste materials. The homes were fitted with 60 year-old maple floorboards, which were diverted from landfill when a local school was demolished.
The 2012 Social Value Act has helped to drive interest in value beyond just cost. However, its application to housing development tends to focus on quite narrow construction outputs and compensatory benefits, such as volunteer hours donated by the developer to help local community groups. WeCanMake wanted to take a broader outcome-driven approach.

We started with the social value framework that Bristol City Council uses, known as a TOMs framework. It was a good start – for example measuring carbon saved in the construction process – but does not count many things that people in our community were telling us are important in making a good home and neighbourhood. So we ran a series of creative co-design sessions with future residents and community members. A rich array of additional measures – from a sense of belonging to knowing their neighbours – were identified. We cross-referenced the community metrics with HACT’s bank of social value measures, which has an industry accepted methodology for assigning financial values to social value indicators. The result is our “Good Home” Social Value Framework, which tracks social value across four levels over time using a mix of construction data, surveys with the residents every six months, and the data from Smart Citizen Sensors installed in the homes.

The framework provides a way for our community to measure what matters most when new development happens, and communicate it in a way that is recognised by the wider development industry and public sector. The next challenge is how to convert the substantial social value this kind of place-led innovation can generate into upfront capital investment to sustain and scale that innovation.
Social Value Generated by the First Two WeCanMake Homes:

£375,171
Making homes as social infrastructure

Click to see our film!
WE CAN MAKE HAS SUCCESSFULLY COMPLETED TWO LOW-CARBON, LOCALLY-MADE LIVING RENT HOMES IN KNOWLE WEST
John is an ex-bricklayer, who after splitting with his wife was experiencing homelessness. He works as a groundsman for an environmental charity. In his spare time he loves cycling, going to live music, and volunteers mending bikes for a local youth charity. Bill lives with his son Liam in a council house. Due to ill health, Bill was struggling to maintain their large garden. Bill is a former goal-keeper, a keen cook, and sci-fi enthusiast. Liam loves Bristol Rovers and his PlayStation.

Through our open community participation activity, which includes open call-outs, social meet-ups, and hands-on workshops and events, both John and Bill got involved with WeCanMake. John and Bill were supported to explore if the WeCanMake model could work for their situations, which included a facilitated match-making process.

"Our garden was just too big – we couldn’t look after it and it was a big stress. I had just finished a messy divorce and was a single dad. John was in a similar situation. I have been homeless and it isn’t the greatest thing in the world. To give someone the opportunity to have a home was a good thing. It was just nice to be able to be nice to someone."

BILL

"WeCanMake came at the right time. It was a light at the end of the tunnel. A lifeline."

JOHN

Toni likes photography and loves taking care of her garden. Her daughter Amancia is three and enjoys counting and jumping on beds. Toni and her daughter were living in the spare bedroom of her parents’ council house. They needed more space and a place of their own but finding anything affordable was proving impossible. Toni’s parents came to a WeCanMake community event; they had a large garden and thought the approach could work for their daughter’s situation.

"I was living with my daughter, at my mum and dad’s. Space was quite cramped. It was hard. I couldn't imagine how we could ever get a place of our own."

TONI
"I think John's home is awesome. It just looks like it belongs"

BILL

"Robots, augmented reality, Modern Methods of Construction. All this stuff is a completely new world for me, I'm a bit of a luddite really. But now I'm not scared. I can do this stuff.

JOHN

"We're literally building our community from the bottom up. That's the most important thing to come out of this - it's given me ownership of my community. It's giving people different choices, better choices about how things can be. And it feels like only the beginning."

JOHN

"Now I'm in, I'm over the moon. I get a real buzz that I've helped design it. Had a hand in every part. I'm able to live a much fuller and happier life. My daughters, my grandchildren, they now see my house as somewhere they can come and they really like the space. That fills me with pride."

JOHN
MAKING TONI AND AMANCIA’S HOME

"I'm so proud I've helped make a home for me and my daughter"

TONI

"I've helped design it. I made a whole wall in the Factory. I've painted it. I've laid the floor. I've grouted it. I've varnished it. I've loved making it homely. Making it my own."

TONI
WE CAN MAKE A THRIVING NEIGHBOURHOOD

More than just two isolated units, the addition of the WeCanMake homes act like urban acupuncture, with ripples of value radiating out helping to foster the conditions for a thriving neighbourhood:

- Relationships of mutual care are fused together
- Localised supply-chains flow to generate community wealth
- Existing infrastructure is adapted to meet changing needs
THE POWER OF SMALL... SCALING WE CAN MAKE
The WeCanMake prototype is an innovative and additional way to create affordable homes at the point of need. It demonstrates how the system can be positively re-wired in the here and now. The model of opt-in gentle densification could create 150 additional homes in Knowle West – each home created exactly where people need them most. Knowle West is an interwar council-built estate of 5,000 homes – an additional 150 homes represent a 3% intensification of the existing housing stock.

There are 1.1 million council-built interwar homes across England alone, very similar in terms of design and density to those in Knowle West. A 3% intensification would mean an additional 33,000 homes in England.

If the approach was extended to the 2.2 million market-built interwar suburban homes – again built to a similar low-density design – then a further 77,000 additional homes could be created.

The model has further scope for scaling, through other types of neighbourhoods adopting the approach (beyond just interwar council-built estates).

There is an additional bonus through the release of homes that were previously under-occupied (eg. through elders downsizing). This issue is of particular relevance to reducing council house waiting lists and achieving a more efficient use of the existing stock.

“WE THINK IT IS AN APPROACH THAT CAN SCALE-UP, BOTH IN BRISTOL AND IN HELPING SET A NEW MODEL FOR ESTATE REGENERATION ACROSS THE UK”

CLLR. TOM RENHARD, CABINET MINISTER FOR HOUSING, BRISTOL CITY COUNCIL
A NEW SUPPLY OF LAND FOR COMMUNITY-LED AFFORDABLE HOMES

**STREET**
In council-built interwar housing estate Knowle West, Bristol

**NEIGHBOURHOOD**
5,000 homes in Knowle West

**CITY WIDE**
15,000 council-built interwar homes in Bristol

**NATIONALLY**
1.1 million council-built interwar homes

- **2 HOMES**
  Built at the point of need

- **150 HOMES**
  Representing a 3% intensification

- **450 HOMES**
  Representing the same 3% intensification

- **33,000 HOMES**
  100,000 homes if applied to all 3.3 million interwar houses
Our neighbourhood test-space in Knowle West has shown how a community can collectively imagine, anticipate and begin to make a new kind of housing future. The process of co-designing, planning and making our first two homes provides a tangible glimmer of that new future – one that is regenerative, collective and cares about the long-term, and holds the potential to scale.

To fulfil this potential requires thinking about scale differently in three ways:

**BEING AGGREGATE**

Scaling-up is not the only route to impact. Scaling-out, scaling-deep, scaling-breadth; the next big thing could be lots of small things. The WeCanMake prototype offers a model for a cumulative approach to impact, with scale achieved through multiple, distributed and diverse neighbourhoods and communities using a common set of tools to shape and deliver development on their terms.

Alongside our vision for around 150 micro-site homes to be made within Knowle West, is that other communities can do something similar. That they too can add their 2, 10, 20, 100 (or more) affordable and community-led homes exactly where they need them most.

**BEING COLLECTIVE**

The magnitude of the challenges we face – from the housing crisis to the climate emergency – is vast. The actions individuals or communities can take to tackle these challenges can seem small, fragmented and uncertain. However, by being part of the growing movement of place-led innovators across the UK and beyond, we know that there is energy and power through being distributed yet connected, and diverse yet collaborative. The vastness of the challenges we face demands to be matched with an age of mass imagination, experimentation and collaboration.

Part of being collective means greater recognition of the value of this kind of community and place-led innovation in mainstream development initiatives, government policy and investment priorities. ‘Local’, ‘neighbourhood’, ‘community’ do not have to mean small or slow. They can be the infrastructure engines of a new big and bold kind of future, often reaching parts that neither the commercial nor public sector can reach alone.

**BEING OPEN**

We believe the neighbourhood is a relatable and human-scale framework within which to seed and grow social change. Our prototype is very much crafted through our context: a hundred-year-old council-built estate atop a hill on the edge of a prosperous yet unequal city. But WeCanMake is not intended as just a local project. There are many other neighbourhoods across the UK and beyond that are experiencing similar challenges to ours. What we have found and made is designed to be open for adaptation and adoption by others. For example:

- The innovative land assembly model which enables opt-in densification for people in housing need has been verified at national level by the Secretary of State at DLUHC, and the model could be used in other neighbourhoods;
- The planning precedent to unlock micro-sites exclusively for community-led affordable homes has been established, and could be used to secure planning for other similar sites;
- The transfer of micro-site land valued at below £2 million on a 125 year Social Value Lease has been established and has the potential to be applied to other sites.

WeCanMake will continue its testing and learning process, adding to and refining the prototype, applying what we discover to the design and delivery of a new batch of new homes each year, and sharing the learning with others.

**FIND OUT MORE IN OUR POLICY OVERVIEW →**

“What I’d say to other councils is: don’t be afraid to have a go, and talk to Bristol about what we’ve done and how”

ELAINE OLPHERT, FORMER HEAD OF HOUSING BRISTOL CITY COUNCIL

wecanmake.org
WeCanMake’s early success shows that when motivated communities and local authorities work together, it is possible to positively re-wire the existing housing system to better meet people’s housing needs now.

Our model for community-led urban infill development meets specific national policy goals on land use, public land disposal, housing supply, neighbourhood planning, design coding, modern methods of construction, local economic development and affordable housing. It also supports broader policy agendas on levelling up, social value, social care, and climate change.

Few housing projects can claim to achieve so many policy objectives at once: scaling up community-led urban infill development should be a natural priority for national and local government policy, practice and funding.

Yet some of the steps on this path are unnecessarily slow and difficult. The following policy recommendations aim to simplify and standardise the process, making it easier for more local communities and councils to adopt the WeCanMake approach.

### A NEW COMMUNITY LED URBAN EXCEPTION SITE POLICY (CLUES)

The new version of the national planning policy framework (nppf) should include a new community-led urban exception site policy (clues).

This should be based on the well-established Rural Exception Site policy and would allow new homes on sites that would not normally be granted planning permission, and are:

- For five homes or less (to avoid any conflict with the NPPF’s current entry level exception sites or the proposed First Homes exception sites);
- Not on greenbelt land or in designated rural areas;
- For permanent, community-led affordable housing (with an asset lock in place, as under the proposed definition of community-led developments in the current NPPF revisions) that meets needs identified by the local community.

This policy, translated into Local Plans or referenced in planning applications, would make it clear that CLUES are, like Rural Exception Sites, intended to create opportunities for community-led urban infill development, so that such proposals did not fall foul of other policies in Local Plans or the NPPF, such as those prohibiting garden grabbing or loss of urban green space.
DLUHC POLICY CIRCULAR

DLUHC should issue a policy circular endorsing the principle of community-led infill development and restate existing national policies to encourage local authorities to actively support community-led urban infill. In particular, local authorities need to be reassured that they are able to transfer land to community organisations at low or nil value, so DLUHC should publicly restate:

- The legality of transferring land out of Housing Revenue Accounts as confirmed by the Secretary of State in the consent issued to Bristol City Council for the transfers to WeCanMake;
- Councils’ general power to sell land below its market value, as long as the undervalue is not more than £2 million.

SUPPORT FOR COMMUNITY-LED URBAN INFILL PROJECTS

Local or combined authorities should publish their own cross-cutting policy statements expressing their in-principle support for community-led urban infill projects and determination to enact this through their planning, property, housing and other functions. These should include the same conditions as the CLUES policy proposed above, and encourage the creation of design codes by local communities to ensure homes meet local expectations.

These policies should be included in revised Local Plans as and when these are produced, with reference to the CLUES policy in the NPPF if this has been adopted. But they do not require the completion of a full Local Plan to be effective, as local authorities can implement them through other channels immediately, including internal practice notes for planning staff and conditions attached to planning permissions.

INTERNAL PROCESS FOR SUPPORTING COMMUNITY-LED INFILL DEVELOPMENT

In parallel with supportive policy statements, local or combined authorities should create their own internal process for supporting community-led infill development. These should include making small grants and in-kind resources available and identifying named individuals in housing, planning, legal and property teams to support communities in:

- identifying appropriate sites for urban infill development;
- acquiring sites, including transfers from local authority Housing Revenue Account or General Funds;
- producing design codes;
- making planning applications;
- securing funding from public, private and charitable sources.

MATERIALS, TOOLS, AND PROCESSES

The newly created Office for Place should provide materials, tools, and processes to help local authorities and communities to produce their own design codes, and to create and publicise exemplars of design coding in practice.

ENSURE APPROPRIATE FUNDING AND SUPPORT IS AVAILABLE

DLUHC should ensure that appropriate funding and support is available to community-led organisations that are not Registered Providers (social landlords registered with the Regulator of Social Housing), drawing on the precedents of the Community Housing Fund, the Social Housing Decarbonisation Fund and the new Single Homelessness Accommodation Programme prospectus, all of which included routes for non-RPs to apply for funding. Funding should include both revenue funding for group development and capital grant for development.

The Levelling Up and Regeneration Bill currently going through Parliament includes the proposal that 25% of the new infrastructure levy will go to parish councils and neighbourhood forums, which don’t exist everywhere. To ensure this welcome idea can support urban communities too the beneficiaries should be widened to include community anchor organisations and community land trusts.

wecanmake.org
FIELDNOTES

WE CAN MAKE ENDEAVOURS TO WORK IN THE OPEN. BY THIS WE MEAN SHARING WHAT WE DISCOVER, MAKE, AND LEARN AS WE GO.

Here we share some fieldnotes about our test-space process, some of the knottier technical details that lie behind the prototype, and inspiration from some of our fellow place-led innovators.

READ ABOUT OUR COMMUNITY & COUNCIL COLLABORATIVE WORKING →

READ ABOUT DEVELOPING A LIVING RENT POLICY →

READ ABOUT A CENTRALISED VS LOCALISED MMC →

READ ABOUT OUR GOOD HOME SOCIAL VALUE FRAMEWORK →
PLACE-LED INNOVATORS

Feeling inspired? WeCanMake is part of a growing movement of place-led innovators in the UK and beyond. Our own ideas have built on and been complemented by the work of others. Here are a few to check out:

AMBITON ENERGY CIC, LAWRENCE WESTON, UK
https://ambitioncommunityenergy.org/
A large-scale community owned onshore wind turbine set up by local residents to pursue much needed community regeneration.

BETTER BLOCK, USA
https://www.betterblock.org/
A US-based nonprofit that educates, equips, and empowers communities and their leaders to reshape and reactivate built environments to promote the growth of healthy and vibrant neighbourhoods.

THE BOLDNESS PROJECT, WINNIPEG, CANADA
https://winnipegboldness.ca
A research and development project utilising social innovation processes to reimagine an urban area, with Indigenous knowledge and experience at the centre.

CIVIC SQUARE, BIRMINGHAM, UK
https://civicsquare.co/
A vibrant home to collectively-owned and built 21st Century civic and social infrastructure. A place to gather, make, create, grow, organise, play and connect.

DORCHESTER ART AND HOUSING COLLABORATIVE, CHICAGO, USA
https://www.theastergates.com/project-items/dorchester-art-and-housing-collaborative-dahc
An artist intervention around the issue of artist housing, consisting of 32 units and a theatre space, made for those who receive affordable and low-income housing support.

DUDLEY CO-LAB, DUDLEY, UK
https://dudleyhighstreet.uk/colab-dudley/
An experimental lab in a high street shop front that involves hundreds of people in doing, creating and making to nurture connection, imagination and long-term thinking.

EL WARCHA, TUNIS, TUNISIA
https://www.elwarcha.org/about
A collaborative design studio promoting alternative forms of education and civic actions through the making of urban furniture and art installations in a Tunis medina.

EVERY ONE EVERY DAY, LONDON, UK
https://www.weareeveryone.org/
A network of 1000s of people living in Barking and Dagenham who are working together on different neighbourhood projects around the borough.

FREEDOM + BALANCE, LONDON, UK
https://www.freedombalance.com/
An experimental art college designing curriculums on a theme for anyone to exercise their creative identity.

GENTLE /RADICAL, CARDIFF, UK
http://gentleradical.org/
A creative and cultural platform interested in radical ways of engaging art, community, healing + social change.

GRANBY 4 STREETS, LIVERPOOL, UK
https://www.granby4streetsctc.co.uk/
An ongoing community-led project to rebuild Granby, a Liverpool neighbourhood that was nearly made derelict by decades of poorly-planned regeneration initiatives.

HASTINGS COMMONS, HASTINGS, UK
https://hastingscommons.com/
Hastings Commons is a collection of buildings and spaces brought from dereliction into use for homes, workspace, leisure and learning, with rents capped to protect affordability, and where good uses are prioritised over profit.

MAIA GROUP, BIRMINGHAM, UK
https://www.maiagroup.co/
A Black-led arts and social justice organisation working at neighbourhood-scale globally, from Birmingham.

NUDGE COMMUNITY BUILDERS, PLYMOUTH, UK
https://www.nudgecommunity.com/
A community business that owns and runs activity back to a local high street one building at a time.

ONION COLLECTIVE, SOMERSET, UK
https://www.onioncollective.co.uk/
A social enterprise tackling social, culture and environmental injustice, delivering regeneration projects that aim to create purposeful jobs, build local economic resilience and widen cultural engagement.

OPEN HOUSE, OXFORD, UK
http://openhouseoxford.co.uk/
A public talking shop on housing and homelessness involving people in the decisions that are being made about housing in Oxford.

PRAXIS PROJECT, USA
https://www.thepraxisproject.org/
A movement to centre community and build power for health, justice and racial equity in areas across the USA.

RAISE THE ROOF, DORSET, UK
https://www.raisetheroof.info/
A collaborative research project in response to the local need for affordable housing, exploring more imaginative ways of building community resilience, beginning with the people and materials of the place.

RESOLVE COLLECTIVE, LONDON, UK
https://www.resolvecollective.com/about
An interdisciplinary design collective that combines architecture, engineering, technology and art to address social challenges.

ROLEZINHO, SALVADOR, BRAZIL
https://www.facebook.com/circuitorolezinho
Circuito Rolezinho proposes new ways of thinking about cultures and humanity, through cultural revolutions, occupying spaces and building narratives.

SUPER SLOW WAYS
https://superslowway.org.uk/
An interdisciplinary design collective that combines architecture, engineering, technology and art to address social challenges.

THRIVANCE GROUP, LOS ANGELES, USA
https://thrivancegroup.com/vision
An organisation working to bring culturally restorative and racially just concepts into the lived experiences of communities.

TRAFFIC JAM SESSIONS, NAIROBI, KENYA
https://atlasofthefuture.org/
Nairobi’s minibus taxis carry over 3 million people everyday. This project showcases new DJs and genres, with the matatus becoming mobile clubs.

WIJE’WINEN, HALIFAX, CANADA
https://wijewinen.ca/participatory-cities
A physical and social infrastructure project providing space and visibility to urban Indigenous culture, celebrating pride and welcoming everyone in Kjipuktuk/Halifax.
We are the pioneers. No one’s ever tried to do this before. Hopefully what we’ve done is make it easier for everyone else who comes after. We’ve made it happen in Knowle West. But this could be the future for a lot more people like me.”

John, Wecanmake resident

Wecanmake is open for others to adapt & adopt
Connect/share/replicate

www.wecanmake.org

Together, we can make new housing futures

2. “Affordable Rents” can be set at up to 80% of the local market rent.

3. Social Rent typically rented at 50% or 60% of market rent.

4. The UK has the oldest housing stock in the EU, with around 38% of homes dating back before 1946 (compared to 24% Germany and Sweden). UK homes heat up more quickly than those in western Europe (August 2021). Chartered Institute of Environmental Health. Available at: https://www.cieh.org/ehn/environmental-protection/2021/august/uk-homes-heat-up-more-quickly-than-those-in-western-europe/


7. https://www.constructionenquirer.com/2022/03/02/persimmon-makes-66000-profit-per-house/

8. Just months before Zero Carbon Homes standards were set to come into effect, then chancellor George Osborne cancelled the policy, citing extra costs involved in the construction. Press reports described how Osborne’s decision was a result of lobbying from the housebuilding industry. https://cs1-eciedcach.com/reports/ECIU_Zero_Carbon_Homes_Final.pdf https://www.fc.com/content/5a2171aa-a778-1e7-9c5-6483146c272c https://www.house-builder.co.uk/news/hbf-report-highlights-greener-cheaper-new-build-homes/


15. WeCanMake is not alone in identifying the potential for ‘gentle densification’. See also Create Streets and Croydon’s work on small sites, which it thinks could provide 20%+ of land needed for housing in the borough.

16. Type of housing need: New shoots (38%) – families where there is an urgent need for more space (children growing up or having offspring of their own); down shifters (29%) – individuals or couples whose house is now too big; extra care (15%) – families who need more space to take on extra caring responsibilities; Better Fits (7%) – families where size of garden/home is too large and they would like to downsize to better maintain their space; other (9%).

17. For example, The Observer Building in Hastings illustrates short-term extractive practices of mainstream development industry. Formerly the headquarters of local newspaper the Hastings Observer, the Observer Building closed for business in 1985, taking 500 jobs with it. Over the next 30 years, the Observer Building stood empty and changed hands 13 times and had 10 different planning permissions approved on it. In each case, the approved plan was not delivered, but was used to trade the building on for a profit without improving it. See No Place Left Behind Commission Final Report.


19. Definition of social value

20. Which required the transfer of the micro-sites from Housing Revenue Account (HRA) land into General Fund land. Councils have more discretion over use and disposal of General Fund land that HRA land.


23. Affordable Rents can be set at up to 80% of the local market rent.

25. The Social Value Act (2012) requires social value to be evaluated as part of the tender process for public contracts, enabling councils, government departments and others to leverage their purchasing power to extract community benefits. The Act requires 10% of the marks when scoring bids to be awarded for social value – a margin that can make the difference between success and failure. Bristol Council, to its credit, has gone further, and requires 20% of the marks go to social value.


27. Social Value Portal. Available at: https://socialvalueportal.com/solutions/national-toms/

28. HACT’s database of social value metrics are free to use for community/charitable organisations. ‘The specialist social value evaluation tool for housing providers’. Impact Reporting (n.d). Available at: https://impactreporting.co.uk/landing/impact-for-housing-providers/

29. The sensors are part of a community tech infrastructure project led by Knowle West Media Centre that is opening up sensing technology for people and communities to track environmental data and use it to take action about the issues they care about. https://smartcitizen.me/. See https://kwmc.cloud/ for more information.

