OPAL PROJECT

ONE PLANET AFFORDABLE LIVING

Developing a community-led low-impact housing approach for genuine affordability

One Planet Affordable Living (OPAL) is a new approach to housing delivery which prioritises citizen-engagement and genuine affordability utilising the One Planet Living Framework for truly sustainable communities. Through analysing case studies from across Europe and carrying out interviews with industry experts, this report details the requirements and processes for creating an OPAL scheme in areas of high housing-demand.

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TRANSITION by DESIGN

Bioregional
Championing a better way to live

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This report has been developed in partnership by Transition by Design and Bioregional through collaborative workshops in London and Oxford and interviews with experts and practitioners.

Transition by Design

Transition by Design (T/D) Co-operative CIC is an Oxford-based architecture and design collective specialising in community-led design and alternative housing models. T/D has a proven track record working with local authorities, community groups, NGOs and professionals in housing, environmental sustainability and innovation.

Charlie Fisher (Lead author)
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Bioregional

Bioregional champions a better, more sustainable way to live. We work with partners to create better places for people to live, work and do business. Our ambition is simple. We want our practical projects to inspire people to live happy, healthy lives within the natural limits of the planet, leaving space for wildlife and wilderness. We call this One Planet Living.

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- David Rodgers, Councillor, London Borough of Ealing
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Foreword

Since the completion of the pioneering BedZED Eco-Village in 2002, Bioregional has been working with partners to create One Planet Communities in the UK and overseas. These are highly sustainable new housing and mixed-use developments which enable the people living and working in them to make large strides towards 'One Planet Living'. The best place to start this transition is in homes and communities, which do so much to shape lifestyles and environmental impacts.

Genuinely sustainable communities save energy and water and reduce waste. They encourage low-impact travel and reduce the need for environmentally-harmful travel. They help the people living in them to be resilient, resourceful and neighbourly as well as being attractive, affordable and healthy places to live and raise a family.

Given the UK's housing affordability crisis, the time is ripe for a focus on creating highly sustainable new housing developments which are entirely accessible for households on low to average incomes. This is why Bioregional is partnering with Transition by Design to promote One Planet Affordable Living.

This study and the OPAL approach outlined within demonstrates that it is both necessary and achievable to build truly affordable and sustainable homes at scale, led by local communities and for local benefit.

Sue Riddlestone, OBE
Co-founder and CEO of Bioregional

EXECUTIVE SUMMARY

The current UK housing system is dysfunctional and is not working for the majority of UK citizens. Rocketing house prices and ever increasing private sector rents create systemic economic risks and leave many living in insecure low quality homes. This report outlines our argument for a new kind of housing delivery; an approach which embeds genuine affordability and citizen engagement into the One Planet Living Framework for building sustainable communities. It uses a combination of tried and tested ideas which are relevant to the housing market today.

The approach, which we call One Planet Affordable Living (OPAL), provides a flexible process for communities to develop their own neighbourhoods and, in doing so, create truly sustainable or "one planet" lifestyles which appropriately address root problems such as environmental sustainability and long-term affordability.[1] Crucially, it is an approach that enables professionals and funding bodies to be most effective in supporting communities to enhance the places where they live.

OPAL focuses on a total of seven priority areas (described in full in Section 4):

Priority 1 – Delivering One Planet Living through a One Planet Action Plan (OPAP) to enable people to live a truly sustainable lifestyle

Priority 2 – Delivering affordability based on local incomes

Priority 3 - Residents playing a lead role in shaping and operating their community

Priority 4 – Housing that never returns to the open market and is not subject to Right-to-Buy

Priority 5 - Delivering at scale – facilitating the purchase of large sites, but with village-scale groups of homes

Priority 6 - Financially viable and self-sustaining

Priority 7 - Options for occupants to purchase equity in the scheme which grows in line with local wages rather than with the housing market

1. Affordability as defined in Section 2 as 30% of take-home incomes in standard UK housing stock and 35% of incomes in energy efficient properties .

Despite the assertion by many mainstream commentators that building more homes will solve the crisis of affordability, the UK has greater housing stock per person than at any other time in history, however a high-quality, secure and affordable home is increasingly out of reach for many.[2] Over a thirty year period house prices have rocketed relative to incomes, making it increasingly difficult to get a mortgage and particularly so for those on lower-incomes. A deregulated banking sector, increasing desire for home-ownership and lower occupancy-levels are some of the reasons why.[3] At the broadest level, the home has shifted away from its social function as a place for living, to a financial asset to be traded for profit.

These issues of housing affordability exist within the context of a growing imperative to reduce the environmental impact of housing. In particular, this means the need for rapid reductions in energy consumption in homes - which make up almost one third of the UK's total use - to tackle climate change and rising fuel poverty.

ONE PLANET LIVING | An initiative by Bioregional

There exists an absence of holistic, aspirational housing approaches at a time when sustained and dramatic improvements to both design and construction are required to increase energy efficiency and enable sustainable communities. This is also reflected in policy. In 2012, the Eco-towns programme that created the Planning Policy Supplement for 'Delivering Sustainable Development', the most comprehensive and ambitious benchmark of its kind, was revoked without a clear replacement. In 2015 the government withdrew the Code for Sustainable Homes in favour of the new, voluntary, Home Quality Mark, which is as yet untested.

Sustainability Charity Bioregional developed the One Planet Living (OPL) Framework in 2003 from their practical experience of creating the BedZED Eco-Village in London.

2. Dorling, D., (2014) ' All That Is Solid: The Great Housing Disaster'
3. In 1995 a homebuyer would have to spend to spend between 3.2 times and 4.4 times their salary on a house. In 2012 this rose to 6.1-12.2 times median incomes. Guardian 2/09/2015

Bioregional has since worked with partners worldwide to deliver One Planet Communities, and made the framework freely available where it has been used in over sixty countries. OPL takes a holistic view to building sustainable communities with ten One Planet Principles, outlined in Section 5. It offers a framework that facilitates happy, healthy lifestyles that don't cost the earth.

OPAL uses well-tested mechanisms for building affordable and sustainable homes but innovates by combining them in unique and contextual ways to achieve project priorities. OPAL utilises five key mechanisms for enabling affordability and democratic control:

1. **Shared-Equity Housing Co-operatives (Mutual Home Ownership)**

2. **Land owned and managed through a Community Land Trust**

3. **Neighbourhood clusters of 35-50 dwellings**

4. **On-site income generation**

5. **Collective participation throughout the process from design and build to management and governance.**

OPAL defines affordability as household rent comprising 35% of net household incomes based on local median incomes, which is in line with accetable ratios of affordability used in other countries.

This report lays out the background to UK policy on sustainable communities, the housing crisis, and a history of affordable housing provision (Section 1). It then further draws on housing models and case studies from a select number of pioneering housing schemes across Europe which go on to inform the OPAL approach (Section 2).

The OPAL approach (Section 3) is explained in terms of structure, those who benefit from it, five core mechanisms for affordability, finance, stakeholder engagement and the role of local authorities.

Finally, the report draws together its conclusions and offers recommendations for next steps.

Beddington Zero Energy Development (BedZED) is an award-winning mixed tenure 100-home eco-village with office space. It was completed in 2002 by Peabody Trust in partnership with Bioregional and designed by Bill Dunster Architects

PART 1. BACKGROUND

This section outlines a brief context and history of the two broad failures of the UK housing market. First, while we have the technical means to build faster and at lower costs than ever before, new housing developments fall far short of creating genuinely sustainable, low-carbon communities. Second, and perhaps the most challenging task of current times, new homes have become increasingly unaffordable for more and more people on low to middle incomes.

1.1 The cost of energy consumption from housing

The domestic sector is responsible for approximately one third of all energy consumed in the UK. Therefore, housing has a key role to play in reducing emissions to meet ambitious Climate Change targets of an 80% reduction by 2050 from a 1990 baseline.[4]

The imperative for reducing the energy consumption of homes in Britain is not simply an environmental concern, however; it sits within the context of a wider cost-of-living crisis. More than two million households are currently trapped in fuel poverty, many having to make a daily choice between heating or eating.[5]

Whilst a continued strengthening of building regulations has driven improvements in the energy performance of new homes, the rate of change has been much slower than necessary. Private housebuilders have favoured minimum requirements over aspirational targets, exacerbated by a significant performance gap between design and construction.[6]

There is political and societal support to further raise the environmental standards of housing at both individual household and neighbourhood scales, and the technical means for achieving this is available through proven standards such as Passivhaus, which should be further supported in policy.

1.2 Models for building sustainable communities at scale

Approaches for delivering low-impact homes at scale to enable sustainable communities are rare. At the start of the 20th Century, a radical new housing movement was initiated driven by social and environmental concerns. Ebenezer Howard's Garden Cities were the first example of a scalable housing model offering community ownership, affordability and resilience to climate change.

4. Climate Change Act 2008, UK Government
5. DECC, 2014, 'Annual Fuel Poverty Report Statistics'
6. Building Performance Evaluation Research, Oxford Brookes University, 2015

The first Garden Cities were built at Letchworth and Welwyn, and kick-started a movement that captured national and international interest. Today, the National Planning Policy Framework (NPPF) makes reference to and invites bids for new 'locally-led Garden Cities'.

In 2007, the then-Labour government launched an 'Eco-Towns' programme that aimed to build ten new communities of 25,000 people each. The programme was a supplement to the far-reaching Planning Policy Statement (PPS1) with ambitious standards.

New Garden Cities and Eco-Towns both take a top-down approach to delivering sustainable communities at a scale of tens of thousands of new homes. Their progress to date is constrained by limited local support and engagement.

An approach is needed that adopts the environmental ambitions of the Eco-Towns planning policy, embeds the affordability and engagement of the first Garden Cities and can be applied to sites within existing towns and cities. This approach could radically change the way sustainable communities are created across the UK.

1.3 The UK Housing Crisis

For around three generations, the UK has increasingly struggled to develop a housing supply which is affordable in real terms. Despite reductions in the real cost of building homes over time (due to modern construction methods and shrinking floorspace[7]), the value of land has continued to disproportionately increase the price of housing. As a result, rental and purchase now require significant demand-side subsidy in the form of programmes such as Help to Buy and a growing Housing Benefits bill.[8]

High levels of home-ownership and a mismatch in supply and demand due to the financialisation of the housing sector are central factors to increasing prices.[9] Areas experiencing high levels of demand without the appropriate building supply, particularly in the South-East of England, have experienced housing costs rising far beyond traditional relationships with average incomes, and the exodus of entire neighbourhoods in areas of low economic development. In 1995, a home-buyer would have to spend between 3.2 times and 4.4 times their salary on a house. In 2012, this had risen to 6.1 and 12.2 respectively.[10]

7. New homes in England have the smallest floor space of European countries, an average floor space of 76m^2, compared to 137m^2 in Denmark. The Case for Space 2011
8. Robertson, M., 'Case Study: Finance and Housing Provision in Britain', Working Paper 51: Financialisation, economy, society and Sustainable Development.
9. Beth Stratford, Housing Crisis, Mapping the Drivers, 2015
10. The Guardian, 'Revealed: the widening gulf between salaries and house prices' 02/09/2015

Consensus amongst the media, housing experts and the UK government suggests that if housebuilding is increased to between 250,000 and 300,000 dwellings per year,[11] that supply will meet both the current shortfall and predicted demand, thereby lowering prices. However, it is essential that as much attention is given to the characteristics of the homes, principly that they are affordable to a range of local incomes and are designed in such a way that minimises energy consumption and encourages social interaction.

1.4 What happened to public housebuilding?

Before their withdrawal at the end of the 1970's, Local Authorities were building over 180,000 homes a year.[12] Many current commentators call for a renewed large-scale public housing programme, however few believe that councils have the capacity and skill-set to return to that number in the short-term. Nevertheless, the House of Commons Council Housing Group has recently acknowledged that the cost of a large-scale public housing programme would be less than no intervention – predicted to be £21.5 billion a year of direct and indirect saving which include housing benefit and homelessness services.[13]

The UK housing stock currently contains one 'affordable home' for every six market homes. In 2014/15 just over 34,000 homes of affordable tenure were built. Some argue that maintaining the current affordable mix is adequate, and thus the sector is on target for getting to the 50,000 affordable homes a year as part of the 300,000 targeted by the Government.[14]

An important factor to consider here is that, due to increases in house prices, a whole generation of the UK is moving to a rental society which will dramatically alter the political landscape. Therefore a secure, affordable tenure is becoming increasingly desirable in high-demand areas where homeownership is no longer a financial option.

In the UK prior to 2010 affordable housing was delivered through Local Authorities and 'Registered Providers' (RP). The development of RP housing was subsidised by the government in the form of an upfront grant. From 2010 the coalition government split the 'Affordable housing' tenure into two types, (i) social rent, which was linked to local incomes and (ii) a new 'Intermediate Rent', which for the first time allowed housing associations to offer rents of up to 80% in relation to local market rents.

The new Intermediate Rent tenure is both a departure from affordable rental linked to incomes and it also changes the way in which affordable housing is subsidised. The new grant programme, The Affordable Homes Programme (AHP) 2011-15, reduced government expenditure on housing by 84% compared to the previous programme, but it also reduced the number of new homes delivered by 62%.[15] The marginal saving slightly exceeds that of the previous grant scheme, but the approach has resulted in a significant reduction in the output of affordable homes at a time when an increase in overall supply is needed.

11. House of Lords Economic Affairs Committee (2016) 'Building More Homes'
12. Department for Communities and Local Government, Table 241: Permanent dwellings completed by tenure
13. House of Commons Council Housing Group, 2010, 'Time to Invest'
14. Walker, C., 2014, 'Freeing Housing Associations: Better financing, more homes', Policy Exchange
15. Wilcox et al., (2015) UK Housing Review 2015: Section 2 Commentary, p.64

Furthermore, the reduction fell hardest on traditional Social Rent in favour of the Intermediate rents. This has been the principal reason for popular mistrust of the term 'affordable' that has developed during this programme.

As part of the Housing and Planning Act 2016, the Conservative Government removed the requirement for the 'Affordable Housing' tenure, which includes both affordable rent and low cost homeownership, in place of a 'Starter Homes' tenure. Starter Homes, which is entirely a homeownership model, is defined as 20% discount on market values at a minimum and does not currently meet the NPPF definition of affordable housing because residents can sell the property after five years at market value, capturing both the original subsidy plus any house price increases.[16]

1.5 Affordable for who?

Definitions of affordability have changed greatly over the last hundred years as the global economic context shifts, necessitating an increased focus on delivering housing which is affordable to a variety of earning levels.

Approaches to measuring affordability originate from the mid-19th century phrase "a week's wage for a month's rent" which established the basis for using a ratio of housing costs to income.[17] Over the years what is considered to be affordable in policy went from 20% of net household incomes in the first half of the 20th century, to around 30% today, which excludes bills and other costs such as Council Tax. Today the internationally-accepted rule-of-thumb is that monthly costs of rent or a mortgage should not constitute more than around a third of take-home pay. Confusingly, there is now also a tenure type called 'Affordable Rent' that bears no relation to the NPPF's definition.

> "Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision"
> **DCLG, 2012** [18]

Critically the gap is widening between those who are eligible for housing support and those whose income can affordably cover their housing costs. 40% of UK residents can now be found in this expanding broad 'Intermediate Housing Market' (IMH)[19] and thus it is this growing segment of society who are most in need of an affordable housing model based on incomes.

1.6 The role of housebuilders

Of all homes built in the last ten years 79% of these were delivered by private developers and housebuilders. The ten largest housebuilding companies have a monopoly on the market, building almost half of the homes in the UK in 2006, compared to 8-9% of homes in the early 1960's.[20] During that period almost half of affordable homes were delivered through

16. Construction Products Association, 2015 'For we are the builders of how many affordable homes' [blog - accessed 16/12/15]
17. Hancock, K., 1993, 'Can Pay? Won't Pay?' or Economic Principles of "Affordability"', Urban Studies. Vol 30. No.1. 1993 127-145
18. Definitions of general housing terms (November 2012), Department for Communities and Local Government
19. Wilcox, S. (2005) Affordability and the intermediate housing market, York: Joseph Rowntree Foundation
20. Brownill, S., et al. (2015) Rethinking planning obligations: balancing housing numbers and affordability

Section 106 agreements so it is clearly a major route to the delivery of affordable homes but it also creates a dependancy on whether developers can make a scheme viable.

1.7 The link between affordability and land values

The rising costs of labour and the shareholder profits of housebuilders are not the central challenge to delivering affordability based on need. The cost of land has a strong effect on the price of homes, for example in outer areas of London the cost of land can make up 40-60% of house price costs. Most housing projects will therefore struggle to build homes which are affordable without taking measures to reduce and retain the value of land. Because land in the UK is such a profitable investment there are many developers holding land with planning permission - the largest nine housebuilding companies were holding enough land for 600,000 homes in 2015.[21]

> In 2014 the average UK household spent £158.30 per week on housing costs, 21% of overall household spending and the second highest expenditure category behind transport. However, this can be somewhat misleading given that there are significant variations between regions and income bands. In London, for example, one in four households spend over half of their salary on housing.[22]

House prices in Germany have closely tracked inflation over the last thirty years due primarily to an approach which favours those who actively improve what is on the land rather than merely benefiting from the unearned income of ownership like in the UK. Land in Germany is bought and sold at existing use value rather than at 'hope' value and thus there is an incentive to invest in the quality of homes.[23]

The planning system could help to distribute these costs more equally through zoned planning and as discussed in the next section, models like Community Land Trusts have mechanisms to permanently freeze the value of land so that it does not rise.

1.8 Ownership, control and benefit

Despite the introduction of Neighbourhood Planning, the great majority of new homes in the UK are planned and developed in a speculative way, with little or no involvement from their future occupiers. The result is homes built to maximise profit for developers, rather than quality and value for their users. Over the past 30 years we have witnessed the result of a largely privatised and profit-driven house building sector: a resistance to advancements in energy efficiency standards and cost-cutting through smaller unit sizes and lower quality construction.

The owner-occupied sector are often still 'tenants of the bank', with mortgaged properties making up almost half of all properties.[24] The younger population, 25-34, are increasingly likely to rent than own a

21. The Guardian (2015) Revealed: housebuilders sitting on 600,000 plots of land
22. Office for National Statistics (2015) 'Chapter 2: Housing Expenditure'
23. Parvin, A., (2011) 'A Right to Build'
24. English Housing Survey 2013-2014, Department for Communities and Local Government

property and so the question of 'who owns, and thus controls, our right to housing?' in an increasingly precarious environment requires focused attention from policy-makers.

The key point here is that the developers and housebuilders have a 'get-in get-out' model and so success is measured in speed of sale rather than long-term quality. We need a housing approach which turns this on its head: taking a long term view that puts occupiers and genuine affordability at the fore.

1.9 Summary

In this section we have reflected on the causes of two broad failures in the UK Housing market; to enable genuinely sustainable communities and to ensure housing is affordable for all.

The environmental impact of housing, when twinned with the growing cost of heating and powering our homes, is a cost which hits the poorest and most vulnerable the hardest. The technical know-how exists to build passive or energy positive homes today, however there are few incentives for private house builders to raise standards. In seeking aspirational models for building sustainable cities, towns, villages and communities, which the NPPF refers to as 'locally-led garden cities', an absence in holistic, practical solutions could be identified through the OPAL Project.

Looking at some of the fundamental drivers to the UK housing crisis it was highlighted how demand has significantly outstripped supply, driving up prices relative to incomes, particularly in the south-east. The cost to the UK Tax Payer has risen sharply through housing benefit to private landlords, whilst the public sector's role in the delivery of affordable housing has shrunk significantly.

Affordability, and its evolving definitions, was discussed, highlighting a fatal break between traditional terms of affordability linked to incomes, rather than a factor of the market.

The role of rising land costs was identified as a major component to diminishing affordability; where land now makes up 40-60% of the value of a home in some cases. The UK, unlike other European countries, has failed to put in place measures to capture the uplift in land prices for social benefit, transferring greater wealth to private land owners.

In examining ownership, control and who is benefiting it was identified that only a tiny proportion of UK citizens have a say over the kind of homes we build. An ever-growing reliance on the market has led to private profit being prioritized over long term social gains.

The subsequent section moves to look at models and mechanism that exist within the current system that can bring about a more progressive and holistic form of development.

The One Planet Living Framework

Learning from its experience as a partner in developing BedZED, a new community in South London with very high sustainability ambitions, Bioregional went on to develop its One Planet Living Framework. This uses ten easy-to-grasp guiding principles covering issues such as sustainable water, travel and transport, zero waste, zero carbon energy and health and happiness.

These ten principles are used to draw up a sustainability action plan for each One Planet Community. For each principle, stretching, time-bound targets are set which move the development towards sustainability. Scientific understanding of global and local environmental limits, in combination with foot-printing tools, is used to draw up these targets.

Today there are eleven One Planet Communities which have been built, are under construction or are planned in the UK, western Europe, Australia, the USA, Canada and Africa. They range in size from a couple of dozen homes to several thousand. In the UK they include the first, 400-home phase of the North West Bicester Eco-Town, developed by housing-provider A2Dominion and now under construction. The One Planet Living Framework has been used by over a thoursand organisations globally including Local Authorities like Brighton and Hove Council and to plan the London 2012 Olympics.

Health and happiness	Encouraging active, social, meaningful lives to promote good health and wellbeing
Equity and local economy	Creating safe, equitable places to live and work which support local prosperity and international fair trade
Culture and community	Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living
Land and nature	Protecting and restoring land for the benefit of people and wildlife
Sustainable water	Using water efficiently, protecting local water resources and reducing flooding and drought
Local and sustainable food	Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein
Travel and transport	Reducing the need to travel, encouraging walking, cycling and low carbon transport
Materials and products	Using materials from sustainable sources and promoting products which help people reduce consumption.
Zero waste	Reducing consumption, re-using and recycling to achieve zero waste and zero pollution
Zero carbon energy	Making buildings and manufacturing energy efficient and supplying all energy with renewables

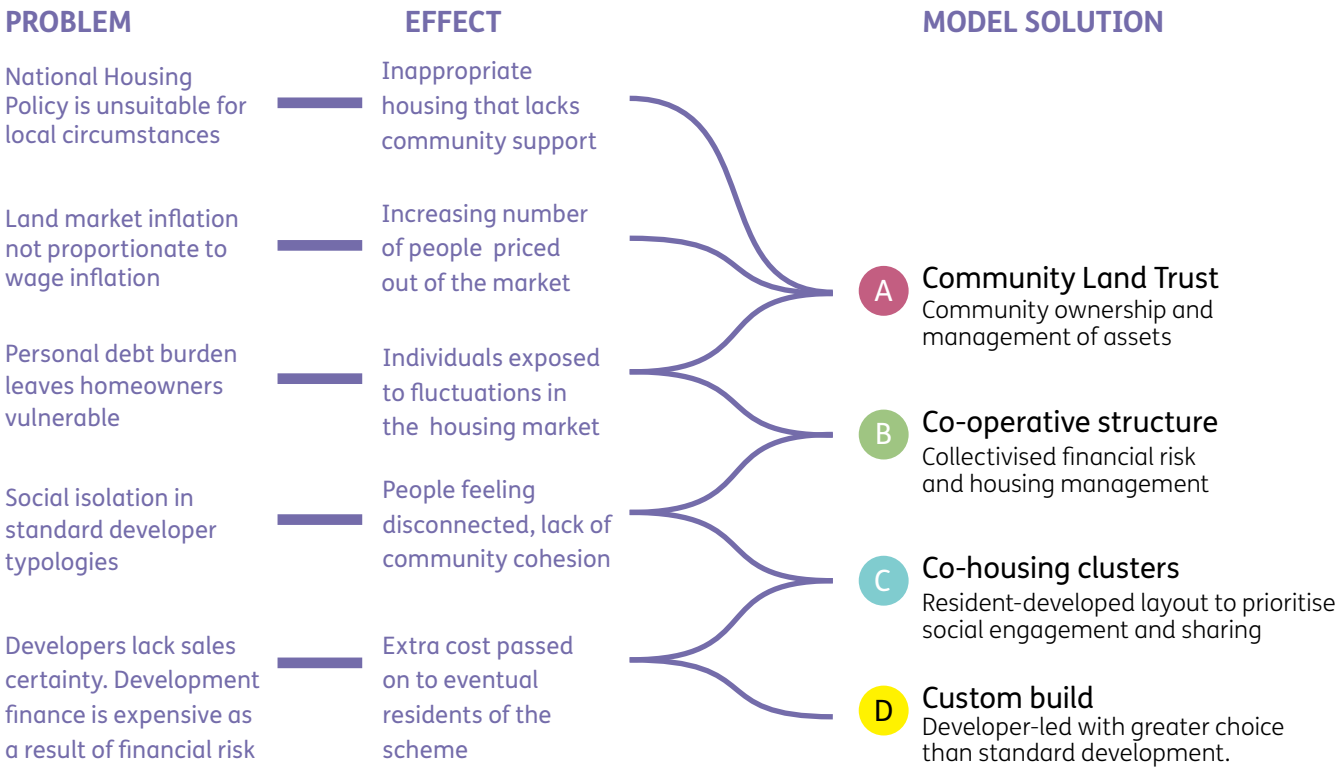
The One Planet Framework for Sustainable Communities

PART 2.
HOUSING MECHANISMS

Having looked at the motivations for conducting a project like this and for setting out the requirements for a One Planet Living delivery model for truly affordable homes, this section will focus on established mechanisms which could be used to embed genuine affordability and increased citizen leadership with the One Planet Living Framework. The list of innovative mechanisms outlined in the following pages are not exhaustive but highlight some of the most effective ways of meeting the project priorities.

This section includes case studies which demonstrate the mechanisms in practice to extract lessons for the creation of a new housing delivery model, the priorities of which are listed at the end of the section.

The diagram below lays out a few of the problems found in the previous section, extrapolates the effect that these problems tend to have on households and the relevant model which can offer a solution. A summary of the case studies are shown to the right.



1. Connety, P. & Lewis, M., 2011, 'Affordability Locked In'

2. Refer to Appendix 1 for a comprehensive analysis of the strengths and weaknesses of each model outlined in this section.

A h

1. St Clements, London
A community-organising approach to develop 23 genuinely affordable urban homes in Tower Hamlets. Currently under construction and residents move in Autumn 2016

A r

2. Somerleyton Road, London
A 300-home mixed-tenure Council-led co-operative scheme facilitated by a CLT with a theatre, open space, shops, offices and a nursery school

B C s

4. LILAC, Leeds
A cohousing group of 21 co-operative units in Leeds with an innovative new model based on local wages. In 2013 the minimum salary required to live in a 1-bed flat was £14,965 a year

D r h

5. Alte Weberei, Germany
A 400-home authority-led custom-build scheme in Tübingen, Germany. The City authority claim that the development was cheaper and faster to build than a developer-led approach

Tenure

r Rent

h Homeownership

s Share payments

A Community Land Trust (CLT)

Community Land Trusts (CLTs) are organisations with an open membership and democratic control which put assets into permanent community ownership to prevent against excessive land value increases due to the speculative market. CLTs have been a popular model in the US since the 1960's, where there are now individual organisations with over 2,000 homes. The first CLT in the UK was in Stonesfield, an old mining village in West Oxfordshire which built 15 homes between 1987 and 1992. As a result of the success of these developments the village also acquired the local post office and set up a pre-school but the movement was slow to build and was particularly located in rural areas.

In 2016, more than twenty years on, there were over 170 Community Land Trusts in England and Wales, half of which formed in the preceding two years demonstrating that there is a growing need for this type of development body. The National Community Land Trust Network, founded in 2012, has grown into an effective lobbying organisation, managing to successfully gain exemption from the Right to Buy and annual rent decreases which Registered Providers voluntarily agreed to in the Housing Act 2016. In the short term this exemption gives CLTs a competitive edge against Local Authorities and Housing Associations who are unable to make schemes work without annual rent rises.

The statutory definition of a CLT in England is found in the 2008 Housing and Regeneration Act:

"a corporate body...for the express purpose of furthering the social, economic and environmental interests of a local community by acquiring and managing land and other assets in order -

- *to provide a benefit to the local community*
- *to ensure that the assets are not sold or developed except in a manner which the trust's members think benefits the local community"*

The key element of the CLT is the ownership structure. Stakeholders tend to be representatives of residents or leaseholders; the wider local community; and related experts although the exact proportion is up to the organisation as to what suits best. This shared governance allows for an ongoing focus on the benefit of the wider community rather than purely individual household gains, which creates better long-term financial sustainability in the local area. Additionally, research by Demos has found that despite community-led approaches taking longer for planning authorities to reach a conclusion, they are more likely to gain planning permission than other types of development.[2]

1. Section 79, 2008 Housing and Regeneration Act

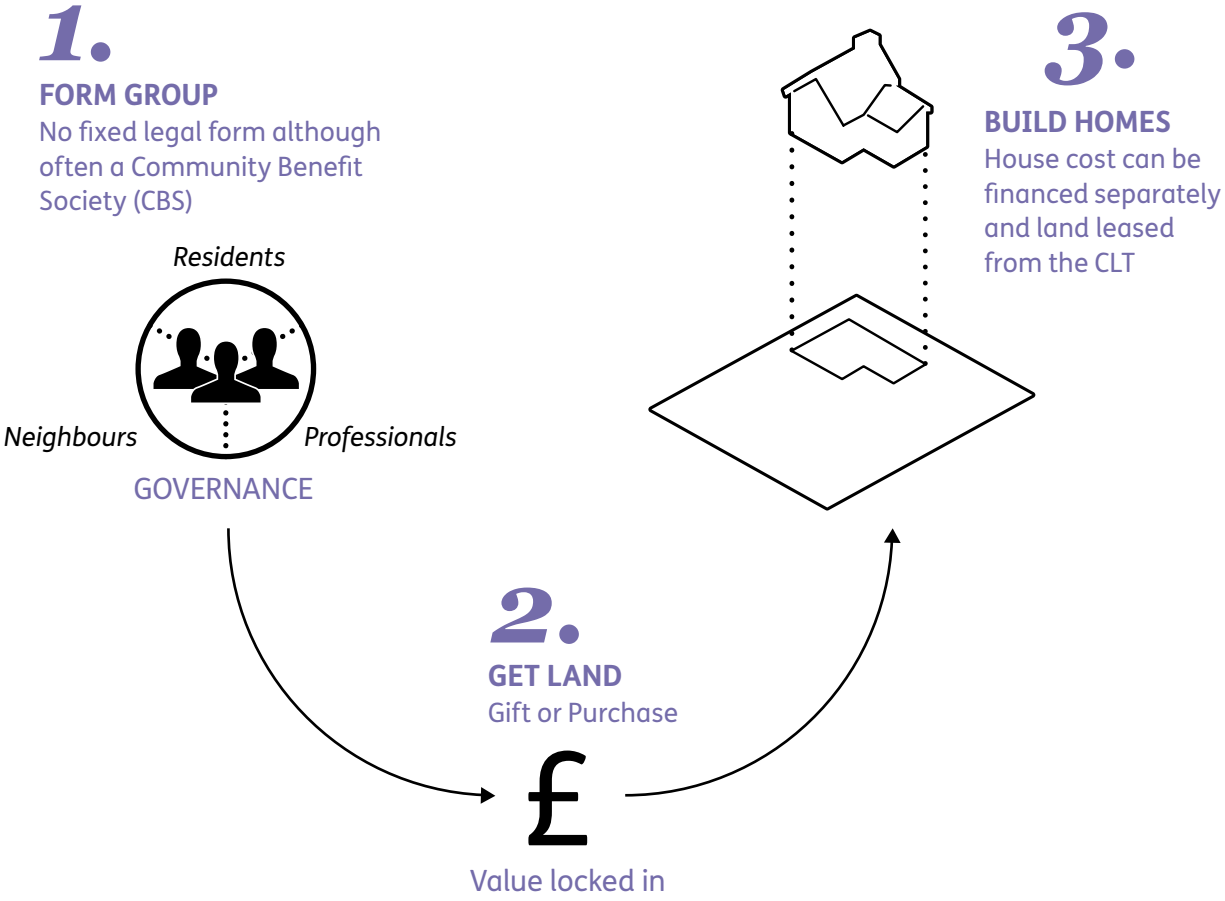
2. Cadywould, C. & O'Leary, D. 2015, "Giving communities more power over local housing developments can help to get more homes built...", Demos [link]

INNOVATION A1

A CLT could purchase the freehold or a leasehold using long term and aggregated finance not generally available to developers such as community share issues. The CLT would then issue affordable leases in return for a ground rent.

INNOVATION A2

Local Authorities in England are able to transfer assets to a CLT up to £2m below the market value.[3] This could be in the form of a freehold however a lease of 250 years can deliver a regular long term revenue to the authority whilst reducing the requirement for the CLT to have upfront funding.



3. s123 & s127, Local Government Act 1972: The General Disposal Consent (England) 2003

St Clements
Tower Hamlets, London

Housing model: Agency delivery model, Home-ownership, leasehold, Income-linked sales formula, resale covenant

Community model: Mass-action community organising, Community Land Trust

No. of homes: 23
(5x 1-bed, 12x 2-bed, 6x 3-bed)

Price per House: 1 bed=£130k, 2 bed=182k, 3 bed=£235k (now less than 40% of market)

Site area (m^2): 4,000m^2 (4 acres)

Project cost: £4.3m (predicted)

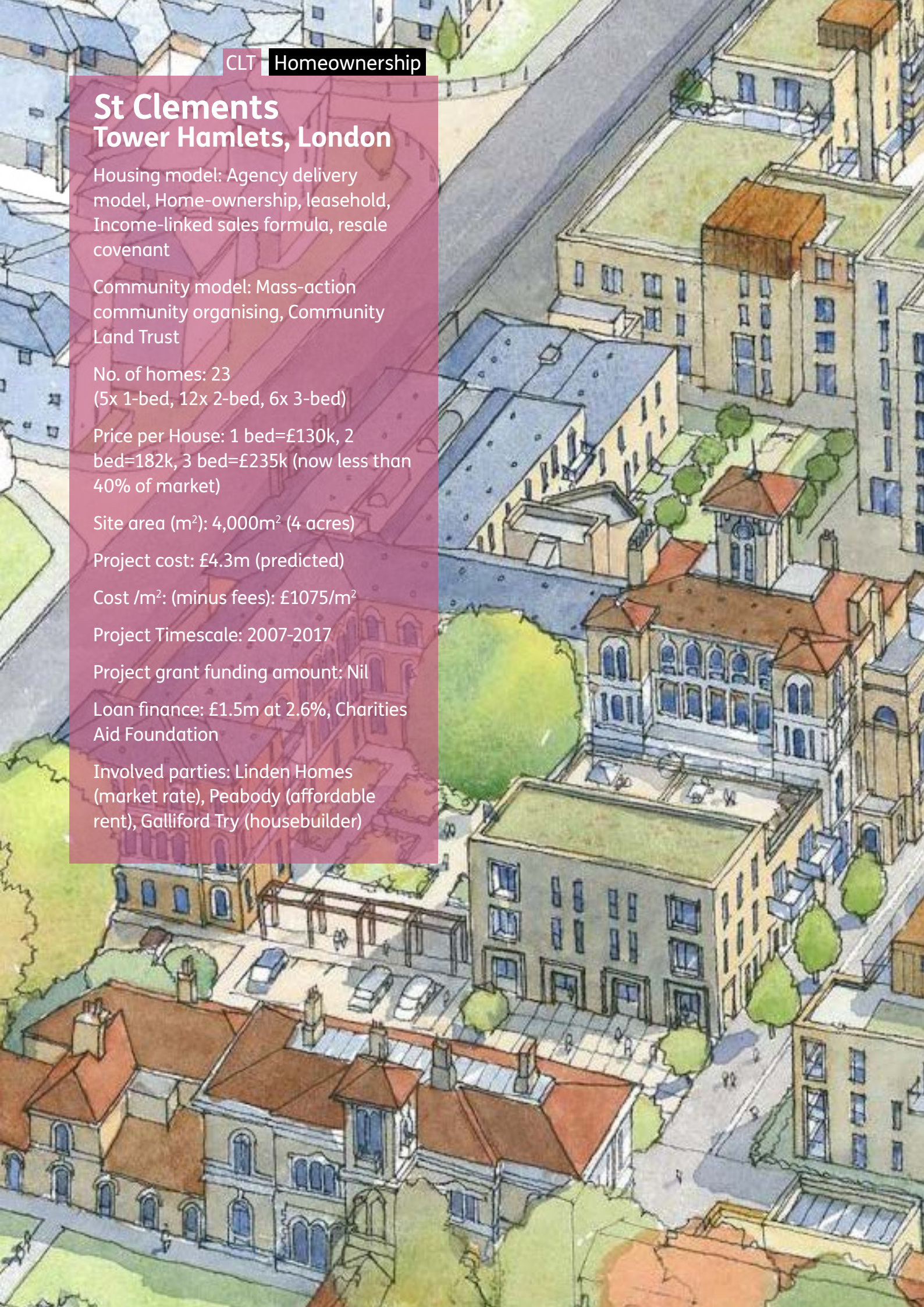
Cost /m^2: (minus fees): £1075/m^2

Project Timescale: 2007-2017

Project grant funding amount: Nil

Loan finance: £1.5m at 2.6%, Charities Aid Foundation

Involved parties: Linden Homes (market rate), Peabody (affordable rent), Galliford Try (housebuilder)



In 2007 London Citizens Community Organising launched a campaign to set up a Community Land Trust in London and the following year it was incorporated as an Industrial and Provident Society (IPS). In the 2009 mayoral elections London Citizens brought together all the mayoral candidates in front of 1000 of the CLT's members to demand a community-led scheme in East London, to which all candidates pledged to get behind. Boris Johnson won the election and then quickly backtracked on the pledge to give ELCLT part of the Olympic site in Stratford, instead insisting they prove their ability with a smaller site.

St Clements Hospital in Mile End had its final patient through the door in 2005, and has since remained empty. East London CLT negotiated with the developer Galliford Try to take a portion of the St Clements scheme for affordable housing for local people. A land transfer wasn't possible so the CLT adopted an agency model in which the developer will build the properties and sells them back to a community foundation as a turnkey development.

Through this process the CLT will have shown that they are capable of delivering affordable homes for local people and can begin negotiations on the larger Olympic site in Stratford.

How is it funded?

The project will be funded entirely through the private sale of homes using an income-linked formula. The homes are planned to be sold at a fixed price of 35% of the fixed local median incomes at the time of moving in, which is multiplied by a factor to take account of the number of household residents in employment (x1 for 1-bed house, x1.33 for 2-bed and x1.66 for 3-bed). The applicants are judged by an allocations panel based on criteria such as local connection and housing need. The same income-linked formula has to be used on resale to ensure that the homes are still affordable to local people.

The developer, Galliford Try, financed the construction of the homes as part of it's planning agreement with the Local Authority and the finished homes were bought by residents through the arrangement with the CLT. The Oak Foundation funded a London Citizens community organiser to work on the East London CLT.

Lessons to be drawn from this project

The easiest way for a CLT to deliver their first scheme is to run as an 'Agency Model' in which homes are sold on completion, releasing the CLT from the long-term debt obligation compared to offering rental properties.

The OPAL delivery approach could run a large first phase section of a scheme at affordable purchase to fund short term development costs.

3. s123 & s127, Local Government Act 1972: The General Disposal Consent (England) 2003

CLT Rent

Somerleyton Road
Brixton, London

Housing model: Council-led, Co-operative

Community model: Mass action community organising, CLT

No. of homes: 304 (79x 3/4-bed, 65x extra care homes)

Price per House: 1 bed=£140k, 3 bed=£285k

Site area (m^2): 15,000m^2 (15 acres)

GIA: 9,500m^2 (9.5 acres)

Project cost: £100m+

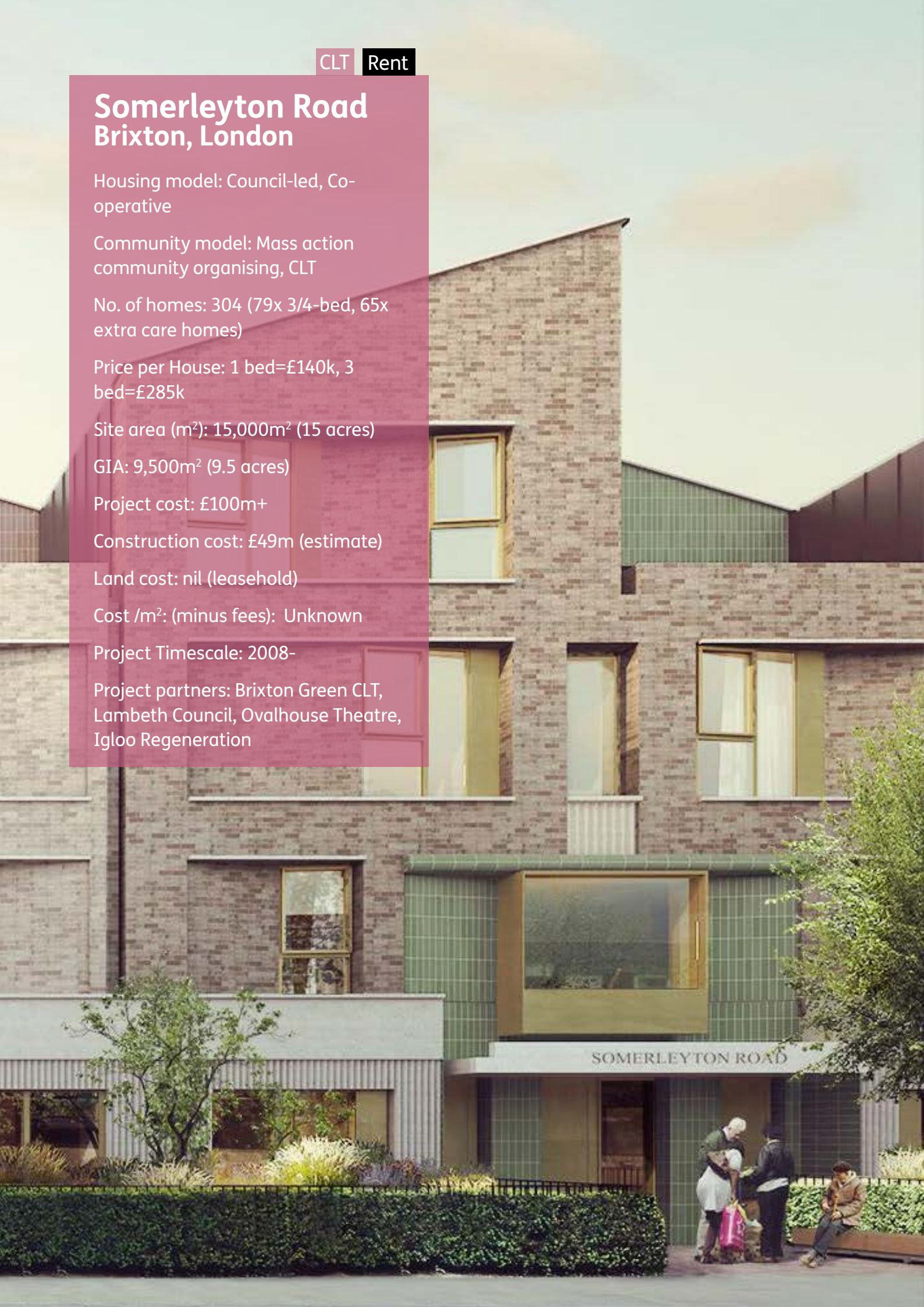
Construction cost: £49m (estimate)

Land cost: nil (leasehold)

Cost /m^2: (minus fees): Unknown

Project Timescale: 2008-

Project partners: Brixton Green CLT, Lambeth Council, Ovalhouse Theatre, Igloo Regeneration



The Somerleyton Road project involves the Labour-led Lambeth Borough Council, partnering with a community group to develop affordable rented accommodation on council-owned land. People who are housed off the council housing register will become members of the co-operative, which exempts the property from the Right-to-Buy policy. 150 of the 304 co-operative homes will be for affordable rent, of which 120 will be at council rent levels. £47m is projected to return to the council through rental return.

The site will provide a nursery and children's space, a chef's school, a creative workspace, retail space, a health facility, play spaces, theatre and a new public square. Given that the CLT didn't need to purchase any homes, the group used a community share offer to drive engagement in the project, unlike other community groups across the country who have raised money for building this way.

The Brixton Green Community Benefit Society was set up in 2008 and in 2013 the partnership with Lambeth Council on the Somerleyton Road project was decided. In June 2014 Igloo were appointed to gain planning and develop the site, with a planning application submitted in September 2015.

How is it funded?

The council retains the freehold on the land and develop it with various partners using HRA funds, s106 money and Right to Buy receipts.

Brixton Green CLT, who have over 1,200 members, will not be involved in the new scheme once construction has finished – they are principally a community development agency. A community organiser was funded by the Borough Council.

Lessons to be drawn from this project

- Long term partnership with a land-owning authority
- Co-operative homes to avoid tenants exercising the right to buy (but not using a CLT mechanism)
- Community groups leading the consultation from the beginning

Somerleyton Road architect's visualisation

B Co-operative Housing

Co-operative Housing, also known as mutual housing or co-ops, are most often organisations which collectively own and democratically manage their homes. Residents are usually members of the organisation, or are encouraged to become a member, and essentially function as both tenant and landlord.[2]

Co-operative housing has many forms, from government-supported co-operatives in Denmark, which make up over 25% of the Danish housing stock, through to the Shared-equity housing form of co-operative found in the USA, which have enabled access to long-term stability and mutual support for low-to-medium income households.

There is a long-standing tradition of co-operative housing in the UK with The Rochdale Pioneers generally being recognised as launching the international co-operative movement, building the first co-operative home in 1861. The garden city movement promoted co-operative tenures prior to World War I but it wasn't until the three decades after World War II that there was strong political and popular support for social housing.

Housing associations led the fourth wave of affordable housing co-operatives across the 70's and 80's but this route declined as the UK government shifted to preferring large-scale housing associations as a delivery method.[3]

Co-operatives in 2016 make up less than 1% of the housing market, which is very small compared to other European countries. Governmental support has dwindled in recent decades despite co-operatives being proven resilient bodies, potentially due to co-operatives being seen solely as a form of low-income housing. Other countries cater to a much broader array of incomes thus there is significant opportunity to diversify the contribution of housing co-operatives in the UK.[5]

Shared-Equity Housing Co-operatives

Instead of joint-owning the property as an individual, members could own multiple shares in the organisation which owns the home or multiple homes. The increased value of a single share when sold could relate to the housing market, like traditional homes, or could be linked to a more stable index such as local wage inflation depending on the principles set out by the co-operative.

2. Definitions, The Confederation of Co-operative Housing
3. United Kingdom History, Co-operative Housing International
4. CDS Co-ops (2003) 'Common Ground'
5. CCH (2009) 'Bringing Democracy Home'

INNOVATION B1

On larger sites CLT's can raise share equity in a single large offer so that multiple co-operative societies could leverage loan-agreements from ethical lenders on a 99 year lease or longer. The CLT is then able to use the funding cocktail to leverage further low-cost finance, such as from pension institutions, local authorities or housing associations on favourable terms due to the dispersed risk to individual lenders

Shared equity, or limited equity, housing co-operatives are a well-established form of housing in Denmark. The 'limited-equity' part of this co-operative model refers to restricting the amount of shares that an individual member can own, usually to the estimated value of the property they are living in.

Between 2000 and 2002, CDS Co-operatives and The New Economics Foundation developed a model called 'Mutual Home Ownership' (MHO), a proposal for Co-operative Shared Ownership in which a Community Land Trust issued leases to co-operative societies whose members could accrue an equity stake in the society's property. It is suggested that an affordable monthly payment would be at 35% of a member's net household income and this would cover loan repayments, management and maintenance costs and any other cost the MHO society incurs. If a resident found themselves in a problematic situation such that they required housing benefits, they could, with permission from the MHO society, have their equity stake frozen and converted to a monthly tenancy giving lots of flexibility and control to residents.

There is a case study on the following page for LILAC in Leeds, which is the first MHO Society in the UK although it didn't follow the exact model set out by CDS Co-operatives.

INNOVATION B2

When potential residents apply to live at the MHO society they would be assessed as to how much of the property that 35% of their incomes allows them to pay off. If some people can only meet the cost of ten percent below the cost of their property then the MHO society is required to find a person who can cover ten percent above. This cross-subsidy mechanism allows MHO societies to offer homes to lower income households. Individuals in receipt of housing benefits could be offered standard rental tenancies by the CLT and receive local housing allowance to cover this amount.

C Cohousing

Cohousing communities are very different to mainstream housing schemes precisely because the residents tend to be directly engaged in the procurement, design, development and long term stewardship of their homes. Each household usually has a self-contained, private house or apartment but residents will often come together to manage their community and share in activities. The symbol of this sharing culture can often be found in the 'common house', a communal building for eating, socialising or even guest bedrooms.

Cohousing in the UK is developing into a broad sector and is seen as a way of combating the alienation and isolation many experience in society today. Recent examples range from developing new communities to refurbishing residential tower blocks and re-purposing empty inner-city terraces.

In the last twenty years this typology has traditionally been the domain of older and wealthier groups who put the savings obtained communally into greater quality or services. There is however an opportunity to use this format to lower the income threshold required to participate in schemes which have the highly-beneficial social and environmental benefits of cohousing.

INNOVATION C1

By clustering the homes into groups of 30-50 homes, it is possible to create a unique identity shared between residents. By delivering multiple clusters at once it is possible to cross-finance the clusters so that all can benefit from economies of scale and subsidise low-income housing

The cohousing model is very well established in the USA, the Netherlands and Denmark. In the USA and Australia groups tend to use 'condominium' or 'strata' legal models as finance institutions are more familiar with them. 'condos' allow members to own a unit but with shared common areas, what would be referred to as a ground rent or a Commonhold in a UK apartment block. Strata are the same as Condos but with an extra layer of communal management.

There is now early-stage funding available for groups through the UK government and lots of advice from the UK Cohousing Network to navigate legal and governance issues.[6] The Community-led Housing Alliance, which set up

6. 'Funding' UK Cohousing Network

D Self Build and Custom Build

The National Custom and Self Build Association (NaCSBA) defines self build as 'projects where someone directly organises the design and construction of their new home' which was the universal term for user engagement with home-building until the government introduced the term 'custom build' in the 2011 Housing Strategy.

Custom build, in which a 'specialist developer' will help to deliver the homes, usually contains a menu of choices depending on the requirements of the scheme but essentially a large proportion of the hard work is taken care of by builders and professionals. Small-scale developers like Igloo, HAB or Townhus are amongst around a dozen companies carving a name in this sector without a large amount of competition from the big ten housebuilders. This is beginning to shift however.

NaCBSA have defined two main routes to custom and self-build for individuals or groups: (i) council-initiated, or (ii) 'working with others'. Neither choice prescribes that a solution must be affordable but there are lots of opportunities to use supporting policy and funding within groups to reduce costs.

With the adoption of the Self-build and Custom Housebuilding Act 2015, groups are in a favourable situation due to being exempt from Community Infrastructure Levy (CIL) (if there is a local CIL policy in place) although a developer will have to find a buyer before construction starts.[7] [8] There are also lots of funding opportunities which are covered in greater detail in Part 3.

INNOVATION D1

There are many opportunities for affordable custom-build and self-build:

- Pre-sale of units reduces risk and deposits help to fund the construction period.
- There is an opportunity for the developer of a custom build site to offer 'golden brick' arrangements in which a site is sold with infrastructure such as drainage and foundations. This currently allows the developer to sell at zero VAT and the buyer to purchase without VAT.
- There is funding from national government and a favourable planning environment.
- If the developer offers 'shells' or 'core housing' for self finish then the process to sale can be quicker than conventional development.

7. Shoosmiths 2014
8. Graven Hill FAQ 2016

Cohousing Co-op Shares

LILAC
Leeds, UK

Development model: Cohousing

Housing model: Shared-equity Housing Co-operative; Fully Mutual Co-operative Society

Residents: 34

No. of homes: 20

Avg. house price: £140k

House sale price: 1 bed=£84k, 2 bed=£124k, 3 bed=£166k, 4-bed=£193k

Site area: 770m^2 (0.77ha / 0.19ac)

Internal area: 1,692m^2

Density: 29 (dwellings per hectare)

Project cost: £2.95m

Construction cost: £1.83m

Land cost: £200k

Works cost /m^2: £1,081

Project Cost /m^2: £1,744

Project Timescale: 2004-2014

Project grant funding amount: £400k (Modcell innovation)

Finance: Triodos £2.1m; £25k Loan Stock; £420k HCA grant, £500k+ member capital

Key Players: Triodos, Ecology Building Society, CDS Co-operatives, White Design

LILAC (Low Impact Living Affordable Community) was the first scheme to use the Mutual Home Ownership Society model. It differs slightly from the version of Mutual Home Ownership set out in CDS Coops original report Common Ground (2003) due to not featuring a Community Land Trust, however the financial principles underpinning the MHOS model are still the same.

Starting out as the Leeds Eco Village in 2004, LILAC pioneered both a new construction technique, using ModCell, and the development of a new financial model. A common house is situated at the centre of the development set back from decking over a pond, with five blocks, dispersed across the remainder of the site, incorporating 34 one, two, three and four-bed units. Built from Modcell, a straw bale and lime-render factory build system, Although they are a co-operative, LILAC are also currently the best known cohousing group in the UK (See C).

LILAC is a Fully Mutual Housing Co-operative, in that residents have to be members of the society to live there and all members have to be residents. Additionally, every member is a leaseholder of their unit. LILAC wanted to ensure that the scheme would stay in collective ownership and so restricted leases to 21 years. Section 5 of the Housing Act 1985 stipulates that leaseholders have the ability to purchase their freehold after 21 years, referred to as Leaseholder Enfranchisement, however this right would negate the energy and effort put in by the community. LILAC chose not to protect their asset using a Community Land Trust because it found this would be more time-intensive and expensive to set up.

The residents of LILAC, ranging from house-sharing young professionals to families with young children and retired couples, form an engaged community which meets regularly for management meetings. Some people are able to live on lower incomes because of LILAC's model but the group has found that creating and maintaining diversity is difficult.

How is it funded?

Project income for LILAC was as follows:

- 10% deposits from all purchasers. Deposits were taken on 15 of the homes (out of 20) at LILAC before construction.
- Additional capital from those who have it available
- £565,066 was pledged by future members through the sale of existing properties, with the remaining 5 homes paying only the 10% deposit.
- Loan Stock from outside investors
- Small amounts from friends and family
- A loan from Triodos over 25 years. £1.5m at 4.9% (70% of project cost when subtracting grant)
- 15% HCA innovation grant

Lessons to be drawn from this project

The minimum household salary required to live in the cheapest property, a 1-bed flat, is £14,965 a year (or £7.5k for two people).

The share threshold is set at 10% above or below the full cost of a resident's allocated property however this could be increased, to 20% for example, as long as the risk remains manageable.

SBCB Rent Homeownership

Alte Weberei in Lustnau
Tübingen, Germany

Development model: Group self build, Authority-led plot auction

Housing model: Self-build appartments

No. of residents: around 700

No. of homes: 400

Avg. house price: 10-20% cheaper than market

Site area: 60,000m^2 (6ha/14.8ac)

Density: 67 dw/ha

Land cost: €4.2 million

Plot price per m^2: £200-£850/m^2

Project Timescale: 2008-2015

Finance: N/A

Project grant funding amount: nil

Since the early 90's there has been a growing housing movement taking hold in the South-Eastern municipality of Bau Wuttenberg, led principally by the local municipality with a small, dedicated, interdisciplinary project team. The move for collective-building (Baugruppen) was facilitated through a combination of socialist-leaning politics and large amounts of land being released by the French army across several war-time barracks.

Tübingen, a university town of 83,000 people, has a strong history of encouraging communities to build. Beginning in the early 90's with the award-winning Französisches Viertel, which has housed more than 4000 people and created 1,200 jobs. In the intervening two decades the city has since created three other quarters of this type, and developed a number of processes, in collaboration with the University, which has made Tübingen stand out as a pioneer in this area.

The City of Tübingen developed a masterplan and a 'B-plan', which stipulates maximum heights, development ratios and building lines. They then have two ways of developing a site:

1. The City runs an open auction for architects and developers buy a 1-year option on plots. The option-holder must then attract cohousing groups who purchase the architect's vision. Mühlenviertel, the previous Baugruppen quarter scheme of 400 homes, completed in 2011, was also developed this way; or

2. The City markets the plots directly and the selected groups have six months to incorporate and pull together finances. The city of Freiburg pioneered this method at the beginning of the 90's.

At Alte Weberei, the second option was used, with the city purchasing the land en-masse and marketing the serviced plots directly, whilst facilitating the groups working with architects and builders. 'Anchor groups' construct the first blocks in their courtyard and develop the underground car park for each block (photo). Plots ranged in size from 123m^2 to 342m^2 and cost between €52,000 and €182,000

How is it funded?

Financed entirely by groups purchasing the plots from developers and architects. Risk is entirely in the hands of the community groups but they are offered lots of technical support.

The land cost the local authority's development company €4.2 million (around £3m) in 2008 and the receipt from the land sales was €13 million (around £9.5m). The uplift was used for the construction of the streets, land remediation and project management; and despite going over the budget the authority still made a surplus of around €1.5m.

Lessons to be drawn from this project

The Tübingen example is very much about de-risking the process of large housing development for authorities by creating an environment for collective building. The unique speed of delivery will be attractive to local government, developers and housing associations to show that this process doesn't have to be burdensome if all parties know when and where they will be engaging in the process. The initial visioning and planning process amongst stakeholders is key to a well-run development process. Equivalent measures such as Local Development Orders can speed up the planning process if the right support is available.

Block plan of Alte Weberei

Summary of lessons learned

These models highlight the fact that many of the features that are required from an OPAL delivery approach already exist, but have rarely been combined or delivered at scale.

East London CLT have used community organising to gather large amounts of people in demanding a type of housing which could provide permanent and genuine affordability for future residents. It's a clear model for mobilising mass action to put pressure on decision-makers and manage the media. Partnering with a developer could be an option for delivering small numbers of affordable homes within a larger scheme of homes for private sale at market prices.

The Somerleyton Road development highlights an authority, Lambeth Borough Council, working with a Community Land Trust as a facilitator for the large-scale delivery of co-operative housing for rent so that the homes are permanently affordable and the £100 million construction cost they financed is retained in the scheme. This case study is very important for showing that local authorities can take an active stance in continuing to build with a long-term view despite national policy pushing for the selling off of land and property assets.

After over three years in practice LILAC showcases that Mutual Home Ownership can work in delivering genuinely affordable homes. The original MHO structure by CDS Coops and NEF included the use of a Community Land Trust, however this wasn't required because the land costs were low enough for the group to finance internally. Additionally, much of the upfront capital came from within the group, at around £24,000 per household, which may not be possible in other areas. When doubt is cast on whether Shared-equity Co-operatives can work in practice, LILAC provides a very handy case-study for delivering genuinely-affordable and sustainable homes. The next step is to take this model to different parts of the country with different economic contexts.

The Tübingen model begins to look at how Local Authorities in the UK could take a leading approach to enabling collective self-build sites for middle to low-income groups. The effective capture of uplift in land values by local authorities to pay for infrastructure would be hugely beneficial but it remains a larger national policy issue. New UK Self-build legislation now provides the tools for authorities to begin designating land for large schemes and Tübingen shows that it can be a faster process than traditional developer-led routes whilst delivering huge social gains.

Setting priorities

Guided by the findings set out in Part 1 and the mechanisms in Part 2, each OPAL scheme should look to develop the following set of priorities:

> **Priority 1** – Delivering One Planet Living through a One Planet Action Plan (OPAP) to enable people to live a truly sustainable lifestyle
>
> **Priority 2** – Delivering affordability based on local incomes
>
> **Priority 3** - Residents playing a lead role in shaping and operating their community
>
> **Priority 4** – Housing that never returns to the open market and is not subject to Right-to-Buy
>
> **Priority 5** - Delivering at scale – Facilitating the purchase of large sites, but with village-scale groups of homes
>
> **Priority 6** - Financially viable and self-sustaining
>
> **Priority 7** - Options for occupants to purchase equity in the scheme which grows in line with local wages rather than with the housing market

PART 3.
A FAIRER HOUSING MODEL

3.1 MODEL SUMMARY

We have drawn on our research of existing approaches to develop the OPAL approach, which combines genuine affordability[1] and a citizen-led approach with the One Planet Living Framework for building sustainable communities. This model is intended to assist in the provision of a standardised, yet flexible, process for developing large scale community-led co-operative housing schemes which enable truly sustainable or "one planet" lifestyles and encourage construction professionals and funding bodies to be most effective in supporting communities.

3.2 STRUCTURE

OPAL is a model for diverse community living, one that is regularly found in continental Europe but rarely incorporates measures to avoid the cost of housing going up whilst at the same time generating an income for the wider-community.

OPAL USES WELL-TESTED MECHANISMS FOR BUILDING AFFORDABLE AND SUSTAINABLE HOMES BUT INNOVATES BY COMBINING THEM IN UNIQUE AND CONTEXTUAL WAYS TO ACHIEVE THE PROJECT PRIORITIES.

The transfer of land for housing development is unnecessarily risky and thus it is becoming increasingly common for partnerships to form between land owners and developers. The land would be owned or managed through a Community Land Trust[2] and the housing owned or managed by clusters of 35-50 unit co-operative societies. The neighbourhood scale would preferably be 100 homes or greater resulting in a project cost of over £10m; a threshold at which large-scale financial institutions will lend at lower costs. Investment confidence is given by the long-term management of the scheme by a land-based Community Benefit Society that also raises equity in the form of community shares from local people.

1. Affordability defined in section 2 as 30% of take-home incomes in existing UK housing stock and 35% in energy efficient properties

2. Community Land Trusts are defined by Section 79 of the Housing Act 2008 and are often an organisation which is constituted as a Community Benefit Society (CBS)

3.3 WHO IS IT FOR?

Drawing on the issues highlighted in Part 1, this model is focused primarily at people on low to median incomes who are not entitled to government support for housing costs. This group are defined as the middle and upper of the Intermediate Housing Market (IHM); typically, those who are unable to buy the lowest 25% of market-value homes and struggle with market rental in high demand areas, across many areas in the UK, but primarily in the South East of England and London.[3]

OPAL rental or purchase costs would be set at a maximum cap of 35% of net median incomes in a local area, as targeted by projects with an equivalent affordability agenda across the world.

3.4 FIVE CORE MECHANISMS FOR AFFORDABILITY

The OPAL delivery model embeds genuine affordability and community engagement with the One Planet Living Framework. The first step on any OPAL project is the application and development of a site-specific One Planet Action Plan. Although the process uses all ten of the One Planet principle, the 'Culture and Community' and 'Equity and Local Economy' principles, guide the creation of mechanisms to deliver genuine household affordability on-site.

The OPAL approach contains a number of 'core mechanisms', which are established housing concepts that can be assembled into 'combinations' to suit the particular social and financial context of a site. Households and communities would decide how much to engage with any of these components based on their particular needs and interest.

The five main component considerations and their attributes are outlined below:

1. Shared-equity Housing Co-operatives (Mutual Home Ownership)

Enables: accessible to a range of incomes, democratic governance, collective ownership, ability to purchase equity linked to local wage inflation.

Mixed-income groups can benefit from group purchasing-power and remove ongoing transaction costs such as stamp duty and corporation tax by setting up a Mutual Home Ownership Society (MHOS) to collectivise the paying back of a mortgage across properties.[4]

Members are assigned a proportion of the collective mortgage based on their income and the size of their property, paying a deposit (usually 5%) on moving in. They then make a monthly payment of 35% of their net income (minus student loan repayments, national insurance and tax only) to the society which includes a monthly service charge fee.

3. Chatterton, P., Low Impact Living (2014)

4. For a detailed explanation of MHO see Conaty, P. et al (2003) '_ Common Ground – for Mutual Home Ownership

Upon leaving the Co-operative a member is able to remove the equity that they have built up plus a potential increase in value based on a formula linked to wage inflation. In the UK this model is also known as Mutual Home Ownership and LILAC in Leeds is an example of this (see Case Study in section 2).

If working with a Local Authority or a housing association, then the co-operative model is a key facility to ensure the homes, and any subsidy, are not lost to Right to Buy. A Community Land Trust can retain the freehold to further ensure the scheme remains in collective-ownership and to allow there to be housing on site for people in receipt of Local Housing Allowance.

2. Community Land Trust

Enables: land removed from speculative market, lower housing costs, larger scale, wider community-engagement, community share offers

A Community Land Trust (CLT) would place the land in trust to remove it from the speculative market, thus increasing affordability of the homes on top of the land over time in relation to the open market. A ground rent would be charged to generate a sinking fund for maintenance and to build up a community funding pot in order to pay back project-specific lending, cover the core costs for the CLT and develop future projects.

CLTs can use many legal models but are often constituted as a Community Benefit Society (CBS) under the Co-operative and Community Benefit Societies Act 2014.[6]

3. Neighbourhood clusters (Co-housing)

Enables: autonomy, sharing, human connection, reduced costs, reduced maintenance and management costs

Groups of 30-50 homes which share facilities such as communal kitchens, workshops, gardens or electric cars. This type of connected living provides a myriad of social and health benefits to residents, along with the financial savings of sharing construction, management and maintenance costs amongst the cluster.

4. On-site Income generation

Enables: long term financial sustainability

Essential for creating truly sustainable and self-sufficient communities with visibly active shared spaces at all hours of the day. Through encouraging enterprise, retail and energy generation, schemes can add diversity, jobs and facilities which make neighbourhoods great places to live.

5. Collective participation in the design, building and management process

Enables: shared costs, social connection

Engagement in the design process, through OPAP processes which include brief design workshops and regular monitoring, can prepare communities for living together and make more appropriate design decisions. This approach can also achieve reductions in projects costs through self-build, custom-build, self-finish and custom-finish using an experienced self-build site manager.

6. The legal entity would need to be for the benefit of a defined community to comply with the provisions of section 79 of the Housing and Regeneration Act 2008.

3.5 FINANCE

The UK housing market has traditionally been a very attractive sector to investors due to the exceptionally high returns on capital however it has also developed a reputation for risk,[7] as can be evidenced in the collapse of household debt in the banking crisis of 2007/08 and the subsequent asset writedown of volume housebuilders.[8]

Having seen the downsides to speculative building for homeownership, financial institutions are looking to more stable forms of income such as the Private Rental Sector (PRS) and the pre-sale of large portions of new schemes before construction to reduce the traditional risks of speculative development. Conventional developer profit-levels are linked to risk and whilst there has been a fall in risk through increased off-plan sales the benefits of the resultant reduced costs have yet to reach consumers due to the profit requirements of shareholders.

"There is a global hunt for long-term income streams and that is a very different financial backdrop to the one that drove finance, and hence real estate property development, in the 20th century"
Yolande Barnes, Savills[9]

Despite the stable income streams possible through a focus on long-term local benefit, the community-led housing sector has so far attracted minimal investment from financial institutions. This reluctance has been primarily due to the resource requirement and risk of managing a portfolio of small loans and the community groups' lack of credibility alongside collateral required for making lending agreements.[10] As such there is an untapped opportunity for flexible financial products which can fit the varied models and requirements of community groups .

Balancing low-cost forms of finance, such as that which can be found through Local Authorities and Pension Funds, will need to be prioritised, alongside more co-operative types of finance such as loan stock or share offers which encourage local buy-in. The International Co-operative Alliance (ICA) has created an order of preference for raising capital for co-operative projects:[11]

1st – a co-operative's own members,

2nd – other co-operatives and co-operative financial institutions,

3rd – social bonds and social investors,

4th – commercial lenders – the financial markets

A financially sustainable scheme requires a strong mix of all of the above types of finance.

Local communities can be encouraged to engage with the project through investment in credit unions, social bonds and share offers. Local Authorities can provide bridge-finance and low-rate, long term finance from the Public Works Loan Board. Large institutions can provide the scale of finance necessary to reduce construction costs.

7. Almost half of UK household assets are held in housing, recognised as exposing the economy to risk, The Bank of England, 'Financial Stability Report November 2013' p26
8. Pignal & Croft, Writedown for builder stakes, Financial Times online [20.06.08]
9. Academy of Urbanism, 'Yolande Barnes - New Business Models for Tomorrow's Urbanism' YouTube video. Uploaded 02/08/16
10. Lambert, B., (2010) Financing Co-Operative & Mutual Housing
11. Guidance Notes to the Co-operative Principles (2015) ICA

Community equity would be used to leverage low cost finance from larger scale institutional lenders, such as pension funds. Finance from the community, although very attractive due to local engagement and preferential rates of return, will not be able to raise the entire amount to finance large-scale projects of over £10 million.

The sources of finance which the OPAL approach will consider are as follows (ranked using the ICA's preference):

Credit Unions

- Community groups have an opportunity to set up and reinforce local Credit Unions as part of scheme development to allow local people to make investments in their community, producing social as well as financial gains
- Credit unions are well-established ethical lenders
- Local Authorities can help to build up the Credit Union's core capital for lending (Tier 1 Capital) through match-funding

Loan Stock

- Long-term, usually unsecured (at risk), loan finance paid at regular intervals
- Loan Stock are loans as opposed to stocks/ shares which are equity. Alternatively, debenture stocks are secured against an asset held by the community enterprise.
- Investment does not confer any ownership or voting rights

"Since 2009, almost a 100,000 people have invested over £100m to support 350 community businesses throughout the UK"
Community Shares Unit[12]

Community Share Offers (equity)

- Share Offers give an equity stake in the community organisation and are more appropriate to smaller community enterprises as the repayment schedule or interest rates can be decided upon after the shares have been raised
- Maximum individual investment of £100,000
- Not suitable for Registered Charities as they cannot issue equity which bear dividends

Local and national community finance institutions

- Community Foundations (£0.5bn investment-capacity nationally)
- Family trusts and those particularly involved in social impact
- Ethical lenders such as Triodos, CAF Venturesome and Charity Bank
- Higher lending rates but used to working with Co-operatives
- Grant bodies such as the Quaker Housing Trust

12. Community Shares Unit (link)

Bond Issues (debt)

- Greater investment certainty to bond-owners, who would be lenders to the community organisation, and thus can raise larger amounts of capital
- Bonds do not incorporate community engagement and London Stock Exchange Bond Markets wouldn't be Community Finance

L&Q Housing Association invested £250m equity into new subsidiary L&Q Housing Trust to leverage further debt in the Private Rental Sector [13]

Local Housing Associations

- Have access to large-scale regulated lending
- Can be project partners with established construction delivery vehicles
- Would be subject to 'Right to Buy' and 'Right to Acquire' if public subsidy used

Local Authorities

- Access to Public Works Loan Board finance (current fixed interest rates from just over 1% depending on borrowing period). Land identified by Local Enterprise Partnerships (LEPs) can enable even lower borrowing rates
- OPAL schemes can offer long-term rental revenue to LA's in return for capital funding
- LA's have a General Consent to finance housebuilding for rental and Local Development Orders can speed up building

UK Government funding

- £2.3 billion allocated by the UK Government to purchase, package and re-sell brownfield sites for delivering 60,000 Starter Homes by 2020 for those under 40
- £1 billion allocated to build 135,000 Help to Buy Shared Ownership Homes
- £1 billion allocated under the 'Build to Rent' fund for development phase of minimum 100 private rented units (extended due to only allocating £0.5bn by July 2015)[14]

Enfield Council has borrowed £80m from the European Investment Bank (EIB), a public bank of 28 member states, to support its flagship £1.5bn Meridian Water regeneration scheme – expected to provide 8,420 homes – at 0.5% below the Public Works Loan Board's usual rate. The bank lends 50% of the value of capital project over 30 years and does not include the purchase of the land.[15]

13. Similar models are appearing in the private development environment with high-risk private equity investments providing leverage through online platforms (i.e. Cogress or Property Partner)

14. Build to Rent Guidance, DCLG

15. Enfield council lands £80m EIB loan at sub-PWLB rate, Social Housing, May 2015

- £3.5bn Private Rented Sector Housing Guarantee to assist with long-term holding of completed property
- 'Community Right to Build' funding
- 'Custom Build Serviced Plots Loan Fund' and 'Builders Finance Fund' (5-250 units)
- £60m Community-led Housing Fund

Private placement with a Pension institution

The Social Market Foundation and Big Society Capital have both called for the introduction of UK Social Pension Funds to invest in housing projects. This analysis has been based on the success of France's 'Solidarity Investment Fund' which has been in operation for over a decade and raised £4.8bn, of which 10% has directly targeted social impact project areas, including housing. The UK pensions market is projected to be worth £600bn by 2030 and the UK government is eager to enable routes to long term saving through directed funds.[16]

There is lots of potential for the OPAL approach to engage with pension funds, particularly with the introduction of compulsory workplace pensions for all companies by April 2017.

It's a very low risk investment with a reasonable return...so I would recommend every pension fund in the country to be looking at investing in housing."

Alex Neil, MSP Cabinet Secretary for Social Justice, Communities & Pensioners' Rights[17]

Igloo Regeneration Fund is managed by Aviva Investors and includes pension funds, life insurance funds and charity funds. The role of the fund is to invest in 'sustainable urban regeneration' which includes joint venture vehicles, and uses a sustainable investment policy called Footprint. The fund is connected to the responsible developer Igloo Regeneration.[18]

Greater Manchester Pension Fund (GMPF) and the city council have signed a £30m joint venture that will see new homes for rent managed by Places for People. Manchester is putting in £5m of land and GMPF is investing the remaining £25m for 240 homes across five sites.

Falkirk Local Government Pension Scheme Fund awarded fund manager Hearthstone Investments £30 million in June 2015 as the first pension-backed housing investment scheme in Scotland. Over 300 affordable homes are expected to be delivered with the Scottish Government providing an initial investment of over £6 million towards 126 social homes in Falkirk and Clackmannanshire. Hearthstone has agreed a £15m loan facility with 'Places for People' to provide commercial loans to housing associations.[19]

16. Good Pensions: Introducing social pension funds to the UK Social Market Foundation
17. Pension Fund Millions to Buy New Homes, YouTube, Uploaded June 2015
18. Sustainable Investment, Igloo
19. Manchester pension fund invests £25m in council joint venture, Social Housing, April 2014

3.6 STAKEHOLDER ENGAGEMENT & THE ROLE OF LOCAL AUTHORITIES

Success in the delivery of large-scale housing projects relies heavily on local support and clearly defined working arrangements between stakeholder partners, as well as the development of a strong culture of collaboration at an early stage.

All OPAL schemes would begin with a One Planet Action Plan (OPAP) co-created by the local and residential community groups. Before any work is undertaken, project stakeholders, which may include Local Authorities, community organisations, housing developers or financial bodies; should develop a shared and agreed understanding of the guiding principles of the community-led development, with the Local Authority's key priorities providing a strong influence. Joint Ventures (JV) can be formed so that parties can bring assets such as land or finance to the table, reducing the need for external borrowing.

It is a strong aspiration that the local community is represented at an early stage in the process, either by initiating the prospect of development or by being invited to engage as a land-based organisation to manage and own the site. We believe this approach to co-production creates better outcomes and accesses different types of long-term and more affordable finance due to the security provided by ongoing and effective local governance.

There are a number of ways in which Local Authorities are able to contribute to these processes:

- The General Disposal Consent (England) 2003 allows Local Authorities 'to sell property at less than best consideration reasonably obtainable' to achieve strategic objectives. The undervalue must not exceed £2 million and has to be less than £10 million in any year

- Tenders currently subject to Official Journal of the European Union (OJEU) process on public disposals above £4.1m

- The General Consent also allows for lease at less than market rent for the benefit of environmental, economic and social wellbeing of the area, up to a limit of £2m difference . Finance can be offered at £3 per head of population per annum[20]

- Local authorities have reinforced Compulsory Purchase powers in the Housing Act 2015-16

- Local Authority-owned housing land can be disposed of, with the Secretary of State's consent, under S.23 of the Housing Act 1985

20. Hill, S. (2008) Affordable Housing Advice Note
The power comes under section 25 of the Local Government Act 1988 which allows for financial assistance through a grant to any person but does not allow for land or property disposal.

PART 4. CONCLUSION

This research has undertaken to explain the crisis gripping the UK as a result of a poorly-performing housing sector and weak top-down implementation of policy to improve energy performance and enable sustainable living. Through demonstrating how alternative approaches could begin to tackle these issues in a meaningful way, the flexible and interconnected set of mechanisms outlined in this study have the potential, when implemented with the right stakeholders, to deliver genuine, and permanent, affordability and sustainable lifestyles.

As discussed in the background chapter (Part 1), after almost forty years of diminishing public housing stock through incentivised homeownership, the Housing and Planning Act 2016 was seen by many to be the final nail in the coffin for social housing, the last form of genuinely affordable publicly-subsidised homes in the UK. At the centre of this act were two important policy additions, the extension of Right to Buy discounts to registered providers of social housing and the re-announcement of Starter Homes, a homeownership product aimed at first time buyers under-40. Given that 'affordable rent' has been defined as 80% of open market value since 2011, the policy environment can now be seen to exclusively support products which are at discounted levels from a market which has little positive relation to people's earnings.

Demand for genuinely affordable housing is stronger than ever as people are increasingly left with few viable choices. The models and case studies contained in Part 2 aimed to connect the various community mechanisms available in order to develop a flexible and contextual process which is based on developing successful neighbourhoods and overcoming root problems.

The mechanisms which can be recommended to groups involved in the OPAL process are:

1. Community Land Trusts (CLTs) which can control the value of land so that future households can continue to have an affordable place to live. CLTs are a very effective way of organising communities around a particular cause as evidenced by the St Clements project in London (p19).

2. The co-operative ownership with a cohousing approach allows groups of people to collaborate to purchase and manage their homes collectively. When used with a Mutual Home Ownership payment method, the society is able to distribute project funding in an equitable way, making sure that discounts in the land price reach people who need it the most. This also allows members to earn equity while they live there, the value of which can be realised when leaving.

3. Finally, the preferable status of self-builders and custom-builders in the UK policy environment means that self-titled 'responsible' developers are able to cut costs and reduce risk in construction.

The success of models which are linked to incomes as recommended in this report will depend heavily on the financial support which can be gained through local investment and a coordinated approach from large-scale financial institutions. In areas of high demand it will be particularly difficult to deliver genuinely affordable homes without discounted land values and so impact measurement will have a strong role to play in convincing landowners of a project's worth over longer periods.

In Part 3 of this report it is suggested that the housing sector has a reputation for being a high-risk investment in the current climate (p.36) but also that, with the right conditions, such risk could be substantially reduced (p.39). The key to this shift is a focus on long-term value for a specified community and the security which that brings. The mainstream property sector is well-aware of the value of placemaking and looks to mimic this focus on legacy to increase land values, however by capturing land values through CLTs and co-operatives, the benefits of placemaking investment can be retained by all.

The next step in the development of the OPAL approach is to identify a tangible small-scale proof-of-concept project, preferably in an area in which Bioregional and Transition by Design are familiar. Given the difficulty of the current development environment, promotion of supporting policy at a local level will be critical in developing replicable environments for community-led low-impact development.

Image references

Cover: One Brighton

p4 The One Planet heart logo, Bioregional Development Group

p6. BedZED, Bioregional Development Group

p13. BedZED, Bioregional Development Group

p14 The One Planet Living Framework, Bioregional Development Group

p16. St Clements Hospital, JTP
[http://www.jtp.co.uk/cms/images/_contained/Project_Clements-Hospital_3.jpg]

p16. Somerleyton Road visualisation, Picture Plane,
[http://pictureplane.co.uk/wp-content/uploads/somerleyton-road-hero.jpg]

p16. LILAC, White Design

p16. Alte Weberei

p19. St Clements Hospital,
http://www.jtp.co.uk/cms/images/_contained/Project_Clements-Hospital_3.jpg

p20. St Clements Hospital

p21. Somerleyton Road visualisation, Picture Plane,
[http://pictureplane.co.uk/wp-content/uploads/somerleyton-road-hero.jpg]

p22. Somerleyton Road visualisation, Picture Plane,

p27. LILAC, White Design

p28. Alte Weberei, Charlie Fisher

p29. Alte Weberei masterplan, NaCSBA
http://customandselfbuildtoolkit.org.uk/wp-content/uploads/2015/12/cs_28-img16-masterplan.jpg

OPAL PROJECT