

# **Guide to sustainable development in community led housing**

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# Sustainable development

Many people carrying out community led housing projects are concerned about creating truly affordable homes and participating in developing the vision, the design, construction and management of their neighbourhood. They want to achieve supportive social arrangements, robust long-term financial structures as well as sustainable environmental performance. This requires not just good governance and low costs but also good thinking, good design and good construction.

Such socially, environmentally and economically sustainable neighbourhoods will consolidate community led housing as a credible alternative to mainstream housing.

Awareness of the possibilities and advice on how to achieve a high quality project are required at the outset and throughout the process of developing a project.

## Potential benefits

Generally, proposals that provide low energy, sustainable homes are often attractive to local authorities and this can improve the credibility of a group and help to access publicly owned land.

### Very energy efficient homes:

- reduce the risk of catastrophic climate change
- significantly reduce running costs and improve the affordability of homes
- improve comfort and eliminate condensation in winter and reduce the risk of over-heating in summer
- will be necessary to comply with carbon reduction measures

### Sustainable development:

- minimizes environmental impacts of waste, water use, resource depletion and emissions arising from construction and use.
- Improves health and wellbeing by providing adequate daylight and sunlight and good air quality
- provides habitats for wildlife
- can create landscapes that provide opportunities for growing food

### Self-help construction:

- reduces build costs by up to 40% and thereby improve affordability possibly making a project viable that would not be otherwise.
- creates much satisfaction from creating one's own home.



- offers opportunities to acquire skills in building and organizing and improve the local economy
- creates self-confidence and self-reliance from working with others, dealing with officials and councilors and this has significant potential social benefits.

## What support is needed?

Groups often need help in identifying possibilities for sustainable, low energy homes and help in designing, detailing and building them. They may be interested in the possibilities of doing some or all of the work themselves but again need help in identifying the options available. Community groups are often encouraged to form partnerships with housing associations, developers and contractors but need help identifying organizations and companies that are knowledgeable, experienced and sympathetic to the aims of sustainability and community led housing.

## When is support needed?

### Group Stage

When considering the vision and aims of the project, information and advice is needed on the cost implications of the overarching decisions on sustainability, energy standards and self-help construction; self-build can radically reduce construction costs whereas zero energy homes may be more expensive to build. It is all about balancing the various aspects to achieve the best outcome in an initial business plan.

### Site Stage

Increasing the number of homes on a site will reduce the cost of land per dwelling but may increase the cost of the buildings themselves which will have to be considered in the financial model. Advice will be required on the planning and build cost implications.

### Plan Stage

The plan stage concerns more detailed aspects of design; advice on the detail and cost implications of achieving low energy & sustainable construction and what contractual arrangements will achieve high quality construction all of which will feed into the drawings, specifications and construction cost plan.

### Build Stage

By now most important decisions will have been made; it will be largely monitoring progress and adjusting the cost plan although, if there is self-help labour, advice will be required on how to organize self-builders and training.



## Live Stage

Advice will be needed on long-term maintenance requirements and costs particularly of any specialized equipment to be included in a sustainable management plan.

## Where to get support

Whilst first port-of-call should always be your local enabling hub for community led housing, which you can find [here](#), there are a number of not-for-profit membership organisations which offer advice, information, training and contacts in relevant specialist areas which will be important to many community groups.

### The National Custom and Self Build Association (NaCSBA)

NaCSBA offer information and have particular expertise in the following areas:

- The **Right to Build** gives everyone in England (but not Northern Ireland, Wales or Scotland) the right to sign up to their local **Self Build Register** of people and groups of people who are seeking to purchase serviced plots of land in the area. All councils must grant enough planning permissions to meet the demand for Custom and Self-build housing in their area, as established by their register.
- The [Right to Build Task Force](#), which is run by NaCSBA, has particular expertise in the town planning issues which affect housing development.
- Finance & Fees including mortgages if you're building as part of a group, Community Infrastructure Levy, CIL, and Section 106 payments under planning legislation and VAT exemptions.
- Community groups need contractors to build their projects and NaCSBA members are a source of developers and builders with experience of working with community groups.

[selfbuildportal.org.uk](http://selfbuildportal.org.uk)

### Association for Environment Conscious Building (AECB)

The AECB is a network of contractors, residents, self-builders, designers, manufacturers, housing associations, local authorities and academics who develop, share and promote green building best practice.

Groups planning to build new or refurbish existing dwellings have access to research materials, technical data, training programmes, discussion forums and networking opportunities on sustainable building practice, products and materials and designer and builder members with expertise and experience in sustainable low energy building.

[aecb.net](http://aecb.net)



## The Passivhaus Trust

The Passivhaus Trust promotes the Passivhaus standard as a highly effective way of providing high standards of occupant comfort and health as well as reducing energy use and carbon emissions from buildings in the UK.

Passivhaus buildings achieve a 75% reduction in space heating requirements, compared to standard practice for UK new build. Passivhaus also applies to retrofit projects, achieving similar savings in space heating requirements.

Evidence and feedback to date shows that Passivhaus buildings are performing to standard, which is crucial, given that the discrepancy between design aspiration and as-built performance for many new buildings in the UK can be as much as 50-100%.

To achieve the Passivhaus Standard in the UK typically involves:

- accurate design modelling using the Passivhaus spreadsheet
- high levels of insulation to the building envelope; U value < 0.15W/m<sup>2</sup>K generally
- high performance windows with insulated frames; triple glazed with U value < 0.8 W/m<sup>2</sup>K
- airtight building fabric; air leakage < 0.6 air changes/hour at a pressure difference inside to outside of 50 pascals.
- 'thermal bridge free' construction with all junctions, edges, corners, penetrations designed and executed to minimize heat transfer.
- a mechanical ventilation system with highly efficient heat recovery

Members of the Passivhaus Trust include designers, suppliers and builders with experience and expertise in low energy construction.

[passivhaustrust.org.uk](http://passivhaustrust.org.uk)

## The Good Homes Alliance

The Good Homes Alliance promotes the building of quality sustainable homes and communities. It does this by sharing knowledge and best practice, commissioning research & publications and running events.

Their current focus is on four main themes; alternative housing models, sustainability standards, health & well-being especially reducing the risk of overheating and zero energy housing.

Importantly for community groups the GHA membership includes designers, housing associations, developers and builders with experience of the design and construction of sustainable buildings and neighbourhoods.

[goodhomes.org.uk](http://goodhomes.org.uk)



# Contact Community Led Homes

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