

Environmentally sustainable living is at the heart of the Bridport Cohousing CLT ethos. Cohousing developments by their very nature provide opportunities for residents to make environmentally sustainable choices through encouraging the sharing of resources.

The commitment to environmental sustainability runs through every aspect of the project, from the design and energy efficiency of the houses, to how the community manages waste and water, how it improves the biodiversity of the site, reducing food miles through shared land use for food production and an integrated transport policy which aims to reduce dependence on private car use.

Principal aims & objectives

There are three areas which will affect the community's carbon footprint:

- **Individual choices:** including travel choices, car ownership and flying; and food choices.
- **Cohousing resident group choices:** including how energy is managed in the common house, how the land is managed, establishing group norms, establishing educative initiatives such as Transition Streets or Carbon conversations to support behaviour change.
- **County wide choices:** for example if bus services are drastically cut then for the overall group the choice to leave the car at home and use public transport is affected.

Starting with the baseline of the average carbon footprint for West Dorset (7.4 kt CO₂) and considering the achievements of similar projects, BC are aiming for a 40% reduction over the first five years of living there (bringing us to 4.4kt CO₂).

Below are some of the ways that they aim to achieve this.

Housing

Principles of sustainable environmental design have been fundamental to the development of proposals during the project. The designs of the dwellings for BC have evolved primarily on principles of environmental sustainability. The aim is to produce an architecture which is locally specific not just materially, but also environmentally. This approach has driven all of the key strategic and detailed architectural decisions alike. The dwellings will be built with high levels of insulation to create maximum energy efficiency - aiming for near Passivhaus standard. The buildings will be timber framed and clad with brick & sustainably sourced timber.

Renewable energy

All of the buildings have been designed to have solar panels on the roofs, which will form part of a microgrid across the whole site. The combined supply, backed up by a battery on site, will be managed by an energy supply company (ESCO) from which members will be able to purchase cheaper, carbon-free electricity. The houses will also all be fitted with air source heat pumps for heating and hot water, Mechanical Ventilation with Heat Recovery (MVHR), bringing fresh air into a very airtight environment, and recovering heat from the stale air which is being pumped out. All houses will come equipped with an induction hob, to enable stove-top cooking to be achieved with maximum efficiency powered by the photovoltaic (PV) system.

Food

The food system contributes around 19% of UK greenhouse gas emissions, excluding emissions for land use change for imported foodstuffs (Food Climate Research Network¹). Furthermore, food choices can have a positive or negative effect on the environment (biodiversity, soil health and water and air quality) and economy depending on the type of agriculture supported and whether food is bought locally or from supermarkets. As a community, BC aims to support members to make positive food choices by encouraging on-site food production wherever possible (fruit and vegetable production, maybe keeping laying hens and bees).

BC would also like to support community food projects by grouping together for bulk food purchases, and as much as possible supporting local businesses. They will establish between them an informal food co-operative to enable the group purchase of affordable organic and wholefoods, and encourage members to strengthen the local food system by supporting local producers, and growers and retailers through their individual purchasing decisions. BC can reduce their overall food costs and food miles - making it more affordable to buy organic and local food.

Waste

Establishing an efficient composting and recycling system forms an essential part of the waste management strategy, with recycling collection points and a system for collecting compost. Residents commit on joining to giving some hours each week to neighbourhood work and managing the composting will be one of the jobs that will be shared out. All residents will be encouraged to commit to a policy of "Reduce, Reuse, Recycle" for all consumer decisions.

Water

The intention is to establish a culture of mindful water usage with all residents on moving into their homes. The group will be managing rainwater so as to reduce run-off from site and collecting it for garden watering, with water features such as ponds and swales to aid evaporation in winter and provide valuable wildlife habitat.

Transport

Residents will work towards a site that is as car-free as possible, aiming to make it easier for residents to access sustainable transport through resources and schemes that will be available on site. The neighbourhood will provide:

- one parking space only per household and limited visitor parking spaces
- secure and dry storage for bicycles/tricycles
- electric charging points for cars

BC will support local bus services by using them wherever possible; encourage the use of bicycles, sharing them where possible; encourage residents to share car journeys. They will explore opportunities for reducing the number of vehicles that are owned by individuals. This could involve creating or joining a local car club. See also our [Transport Policy](#).

Measuring and evaluating:

Because it is intended for this to be a flagship example of a community living sustainably, BC are committed to finding effective ways of evaluating their progress, especially over the first 5 years of the life of the project. Using a simple tool, they will measure each potential resident's carbon footprint as it relates to household energy use and transport. This will be measured prior to moving in and then repeated on a yearly basis for the first 5 years.

¹ <https://foodsource.org.uk/31-what-food-system%E2%80%99s-contribution-global-ghg-emissions-total>).