



Canopy Housing Sustainability Action Plan

Foreword

Canopy will actively strive to reduce its carbon footprint and improve the environment for its current and future tenants, volunteers, staff and other stakeholders.

Climate change, fuel poverty, public health, flood resilience and environmental stewardship are the main drivers behind this commitment. This plan is driven by three strategic objectives:

- **Reducing our carbon footprint:** We aim to reduce the amount of energy – including embodied energy – required to power our homes, offices and operations.
- **Using resources wisely:** Through careful procurement and robust recycling, we aim to consume fewer resources and produce less waste and/or pollution.
- **Encouraging positive behaviour:** We aim to encourage our staff, tenants, volunteers and contractors to use less energy, reduce their fuel bills, consume fewer resources and produce less waste. We will support them in doing this and encourage positive behaviour change.

We are committed to applying BioRegional's ten principles for One Planet Living throughout our business. For each of the core principles, we will address:

- Achievements – What have we done so far?
- Targets – What should we be aiming to do?
- Actions – How will we achieve our targets?
- Involvement – How will we involve our volunteers, tenants, staff, board and the wider community in achieving those targets?

There is a lot of work to be done and we have set ourselves some tough targets. This plan is an important guide to help us reach them.

One Planet Living

One Planet Living is a global initiative developed by BioRegional and WWF. It describes a vision of a sustainable world where people lead healthy, happy lives within their fair share of the earth's resources.

One Planet Living Framework's ten principles helps us focus us on how we can take action for a sustainable future:

Zero carbon	making buildings more energy efficient and delivering all energy with renewable technologies
Zero waste	reducing waste, reusing where possible, and ultimately sending zero waste to landfill
Sustainable transport	encouraging low carbon modes of transport to reduce emissions, reducing the need to travel
Sustainable materials	using sustainable and healthy products, such as those with low embodied energy, sourced locally, made from renewable or waste resources
Local and sustainable food	choosing low impact, local, seasonal and organic diets and reducing food waste
Sustainable water	using water more efficiently in buildings and in the products we buy; tackling local flooding and water course pollution
Land use and wildlife	protecting and restoring existing biodiversity and natural habitats through appropriate land use and integration into the built environment
Culture and heritage	reviving local identity and wisdom; supporting and participating in the arts
Equity and local economy	creating bioregional economies that support fair employment, inclusive communities and international fair trade
Health and happiness	encouraging active, sociable, meaningful lives to promote good health and well being

Zero carbon

Making buildings more energy efficient and delivering all energy with renewable technologies

Achievements

- All refurbished properties have their roof insulation and draught proofing improved significantly.
- All refurbished properties have new double glazing and composite doors installed.
- All refurbished properties have a more energy-efficient heating system installed.
- 34 tenants received energy efficiency training last year.

Targets

- New/refurbished properties to be carbon neutral within 30 years.¹
- New/refurbished properties to have projected primary electricity usage <30kWh/m²/year.²
- New/refurbished properties to have projected heat loss through fabric limited to 15kWh/m²/year.³

Actions

- Carry out xx air permeability tests on our properties each year
- Carry out xx tenant energy audits each year.
- Carry out xx u-value checks on existing properties each year.
- Calculate embodied carbon and energy usage for one of our property refurbishments.
- Consider using on-site renewables and/or subscribing tenants to renewable energy suppliers at start of tenancy
- Incorporate smart meters in our properties.
- Design for reduced energy in use (e.g. clothes drying areas, heat recovery systems, low energy lighting and fittings)
- Install chimney balloons/sheep in properties with open chimneys.

Involvement

- Involve volunteers in air permeability testing using thermal imaging cameras

Notes

1. This means the energy/carbon we use in building and refurbishing properties should be recovered over 30 years through energy generation and using materials that absorb carbon.
2. "Primary" electricity excludes the energy used for heating. At current prices, this target would reduce most tenants' electricity bills to less than £30/month. When we phase out gas heating, electricity bills will increase accordingly but there would be no gas bill at all if we also fitted electric hobs.
3. This means increasing insulation and reducing draughts significantly so that it costs less to heat each home.

Zero waste

Reducing waste, reusing where possible, and ultimately sending zero waste to landfill

Achievements

- xx kg of metal recycled each year
- xx kg of other stuff recycled each year

Targets

- Limit construction waste to xx per refurbishment.
- Limit office waste to xx per year.

Actions

- Set up processes for monitoring construction waste per refurbishment.
- Monitor office waste and clarify how much of it is actually recycled.
- Re-visit using Seagulls recycled paints on refurbishments
- Explore possibility of installing communal recycling bins in developments.
- Set up localised plastic recycling scheme (Permaculture Society might have some funding to help us pay local residents 5p per item recycled. Local businesses might also contribute)

Involvement

- Organize field trip to incinerator.

Sustainable transport

Encouraging low carbon modes of transport to reduce emissions, and reducing the need to travel

Achievements

- Many staff walk, cycle, or use public transport to get to work.
- Bike storage available at our offices.
- Bike-to-work scheme up, running and used.

Targets

- Reduce the number of car/van journeys made by staff.

Actions

- Start monitoring the way people travel to work and offer incentives to encourage reduced petrol/diesel use.
- Improve shower/locker facilities at offices.
- Offer staff mileage rate for cycling to meetings/visits.
- As vans are replaced, move towards electric vehicles.
- Consider pooled electric vehicle (if budgets allow)
- Explore possibility of installing EV charging points at offices.

Involvement

Sustainable materials

Using and selling sustainable products that have a low embodied energy

Achievements

- Diathonite tested and installed at Harlech Terrace
- Further testing of new materials taking place at Lady Pit Lane

Targets

- Phase out use of oil-industry based materials by 2022.

Actions

- Develop new retrofit guidelines for Right-to-Buy properties incorporating more natural products
- Start using more locally-sourced, natural materials (e.g. wood fibre, wool, paper- and hemp-based products)
- Continue material testing programme in partnership with Leeds University.

Involvement

- Organize visit to Native Architects in York for Properties Team
- Organize field trips for properties staff and volunteers so that they can see/handle natural materials and see them in use.
- Organize community-build workshop with Hempcrete UK
- Try making and installing Shou Sugi Ban cladding.

Local and sustainable food

Choosing low impact, local, seasonal and organic diets and reducing food waste

Achievements

- Healthy-eating lunches for tenants/volunteers held every month.
- Several staff have plant-based diets.

Targets

- Plant up 10sqm of edible planting during 2019.
- Phase out unnecessary packaging from kitchen areas.

Actions

- Start ordering milk from milkman instead of in plastic bottles from supermarket.
- Put up more posters encouraging healthy eating practices.
- Establish Library of Things with credits for people who grow their own (allowing them cheap/free access to good quality gardening tools)
- Consider banning use of unsustainable packaging from the kitchen area.
- Consider weekly fresh fruit/veg delivery to offices.

Involvement

- Build proper planters and establish edible planting areas near our offices (and elsewhere in vicinity, if possible).
- Invite tenants/volunteers to prepare healthy eating lunches.
- Organize field trip(s) to Incredible Edible sites.

Sustainable water

Reducing water usage in buildings and in the products we buy; preventing flooding and pollution

Achievements

- Free water pack (cistern filler, shower timer, etc.) given to all new tenants

Targets

- New/refurbished properties to have projected water consumption less than 30m³/bedroom/year.¹

Actions

- Install low water usage sinks, basins, toilets, baths, showers, etc.
- Ensure new tenants choose low water/energy usage washing machines.
- Switch all tenants to water meters and help them reduce water usage through training.
- Install water butts as standard unless house is straight onto street.
- Encourage use of eco-toiletries where tenants intend using grey water.

Involvement

- Install 'slow the flow' planters with volunteers.

Notes

1. Using this much water would be around 60% of the UK household average. It is easier to achieve this target in larger households than single person homes.

Land use and wildlife

Protecting and expanding existing natural habitats and creating new space for wildlife

Achievements

- Small planter installed outside Harehills office.

Targets

- Increase diversity of wildlife found around our properties.

Actions

- Where properties have outside space, ensure wildlife can enter by e.g. leaving gaps under fencing or through walls.
- Install bee, bat or insect boxes at some of our properties.
- Install a green roof at one of our properties.
- Install a green wall at one of our offices.
- Plant trees to offset energy used in construction.
- Establish wild planting areas in Harehills.

Involvement

- Create insect hotels with tenant/volunteer children.
- Involve local community in tree and wildflower planting.

Culture and heritage

Reviving local identity and wisdom; supporting and participating in the arts

Achievements

- By refurbishing empty homes, we revive the local identity of the areas in which we work.
- Mural installed at Harehills office during 2018.
- All offices have some form of exterior artwork.

Targets

- Continue to refurbish at least five empty homes each year.

Actions

- Explore the opportunity for architectural heritage projects in the areas where we work – possibly as new offices.
- Explore opportunities for volunteers/staff to receive local heritage training.

Involvement

- Carry out further public artwork projects.

Equity and local economy

Creating local economies that support fair employment, and international fair trade

Achievements

- All staff are paid at least the real living wage (currently £9 per hour)
- Welfare Fund allows tenants who move into work to pay a reduced rent for up to two years. Thereafter, rents are similar to other social housing.

Targets

- Continue to support volunteers and tenants into work
- Continue to support volunteers and tenants into education or training.
- Where possible, continue to employ local contractors to ensure money remains in the areas where we work.
- Offer two in-house apprenticeships at any one time.

Actions

- Design new properties and refurbishments to allow low or semi-skilled workers to be involved in construction.
- Work with small contractors to help them legitimise their businesses.
- Ensure contractors' staff are paid at least the real living wage.
- Establish new in-house apprenticeships.

Involvement

Health and happiness

Creating local economies that support fair employment, and international fair trade

Achievements

- Our homes are light and airy and have involved the tenants in the refurbishment of them.

Targets

- Design homes that people want to live in (high ceilings, maximised daylight, good thermal comfort, etc.)
- At least 95% of tenants should be proud of their home and enjoy living healthily in it.

Actions

- Minimise use of materials that emit toxic volatile organic compound (i.e. some cleaning agents, sealants, insulation, etc)
- Survey tenants to find out how happy they are with their home and whether they have any illnesses that could be caused by their living environment.
- Carry out xx in-depth post-occupancy evaluations to ensure tenants are happy with their homes.
- Ensure tenants are properly trained in using any controls in their home (e.g. heating controls, ventilation systems, etc.)

Involvement

- Continue with Canopy 500, ensuring tenants have the opportunity to get involved, visit the countryside and meet new people.

Cross-cutting actions

- Develop separate sustainability action plan for Right-to-Buy programme following visit to Native Architects.
- Identify Board champion
- Find tenants and volunteers who would like to be involved – Laura to follow up Marta and Sabeena and advertise in Canopy Facebook group.
- Organize sustainability action plan workshop (Wed 15 May, 11am – 2pm, including lunch)