

New Build Housing Sustainability Policy



Release Date:

Version:

Review Date:

Document summary

The purpose of this policy is to describe the Housing Supply Programme's actions, objectives and targets for delivering more sustainable homes in response to the council's declaration of climate and biodiversity emergencies and supporting the council's aim to become a Carbon Neutral City by 2030.

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1. Introduction and background

- 1.1. Brighton & Hove City Council have created a programme of work to reduce carbon emissions across Brighton & Hove to become a carbon neutral city by 2030. The Housing Committee Work Plan 2019-2023 includes commitments to provide 800 additional council homes and develop a policy setting out how it will work collaboratively to ensure housing contributes to making Brighton & Hove Carbon Neutral by 2030.
- 1.2. The council's Brighton & Hove Circular Economy Routemap includes actions to reduce carbon emissions and materials waste in the built environment. This policy matches the targets and actions in the Routemap Action Plan.
- 1.3. The Housing Revenue Account (HRA) Budget 2022/23 includes a Sustainability and Retrofit Reserve. This reserve can be used to fund the cost of delivering sustainability initiatives in the HRA to achieve the city's Carbon Neutral by 2030 target subject to approval of the business case. New build housing projects can access this fund to support the delivery of carbon reductions and avoid future costs of retrofitting to achieve carbon neutrality. Funding arrangements are subject to full business case approval from Policy & Resources, use of this reserve will be considered alongside the wider financial context for the HRA.

2. Scope

- 2.1. This policy applies to new build housing projects delivered through capital programmes including the New Homes for Neighbourhoods programme and the Hidden Homes programme.
- 2.2. Retrofits, conversions, small infill projects, and non-council housing development projects are not covered by this policy.

3. Principles

- 3.1. Net zero carbon emissions for construction can be defined as: 'when the amount of carbon emissions associated with a building's product and construction stages up to practical completion is zero or negative, through the use of offsets or the net export of on-site renewable energy'.
- 3.2. Net zero carbon emissions for operational energy can be defined as: 'When the amount of carbon emissions associated with the building's operational energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset'¹.
- 3.3. This policy addresses net zero carbon emissions for construction and operational energy. Meeting net zero carbon for construction is entirely within the council's control whereas meeting net zero carbon for operational energy is dependent on resident behaviour. The policy will contribute to achieving net zero carbon for

¹ [Net-Zero-Carbon-Buildings-A-framework-definition.pdf \(ukgbc.org\)](#)

operational energy by, for example, reducing demand through a fabric first approach (insulation and shading), using low carbon heating systems and providing on-site renewable energy supplies.

- 3.4. This policy also addresses whole life carbon emissions which include construction and operational energy, as well as maintenance, repair and demolition. The policy will contribute to this through, for example, minimising need for repairs and maintenance, and designing for reuse of materials within buildings at the end of their life.
- 3.5. To ensure new homes can be let at affordable rents, are robust and are suitable for our client group, a balance must be struck between minimising whole life carbon emissions, minimising impact on the environment, and achieving value for money. Any construction carbon emissions that cannot be offset on site will need to be offset elsewhere to achieve net zero emissions. The council will not aim to offset these remaining emissions at this time but will make every endeavour to minimise construction carbon emissions while achieving its other aims. A strategy for offsetting construction carbon emissions will be investigated as part of a council wide strategy/approach.
- 3.6. The objectives detailed in this policy include RIBA 2030 Climate Challenge targets. The targets were developed with industry experts, are shown to be achievable and consider the latest recommendations from the Green Construction Board.
- 3.7. This policy aligns with the emerging Housing Asset Management Strategy and Housing Strategy to ensure positive impacts for residents, particularly in helping to reduce fuel poverty. To ensure its objectives and targets can be met, the council will actively seek development opportunities that are a good strategic fit with these strategies.
- 3.8. This policy will be reviewed each year and as new information and guidance becomes available it will be updated to include improvements in targets and process which match best practice for the construction industry.

4. Objectives

- 4.1. Whole Life Carbon Assessments are undertaken for every project – to consider the feasibility of different carbon reduction measures and advise on design strategy, as well as estimate and measure whole life carbon emissions for the building.
- 4.2. Circular Economy Assessments are undertaken for each project using a circular economy engagement tool to embed circular principles from the inception of the project.
- 4.3. A Sustainability Strategy following the RIBA Plan of Work is undertaken for each project, to challenge design and construction teams to identify and include sustainable measures at all stages of the project.
- 4.4. Building Performance Evaluations are undertaken for every project – to check buildings are performing as designed and intervene sooner if they aren't, and to improve the design and outcomes of future developments, thereby closing the

performance gap between design and operation. Evaluations can support tenants to fully realise the energy efficiency benefits and information will be shared with the wider construction industry, supporting sector wide improvement.

- 4.5. Building Performance Evaluations will report the amount of reused and recycled materials used, and the amount of reusable and recyclable materials which can be recovered at the end of the building's life. They will also report the amount of materials which hold EPD (Environmental Product Declaration) information. Targets 5.2, 5.3 and 5.4 are currently aims and there are not yet strict requirements to meet them as achievability must be informed by successful case studies. Following evaluation of completed projects and future best practice from the wider industry, the targets will be reviewed to make sure they are challenging but achievable.
- 4.6. If there are specific site constraints or high costs related to carbon reduction measures which make a project unfeasible or unviable, a project would not be required to meet all of the targets given in this policy.
- 4.7. The council will continually review the resource and development needs of council officers in relation to sustainable housing development. This will be aligned to a programme of training and Continuing Professional Development ensuring relevant officers have the knowledge and skills to deliver this policy.
- 4.8. Suppliers and contractors are expected to have the relevant experience to deliver more sustainable projects, or plan to develop such experience. Procurement exercises will include these requirements.
- 4.9. Council officers, suppliers and contractors will be expected to participate positively with actions which address the climate emergency and actively identify improvements.
- 4.10. The council will actively develop formal and informal relationships with local authorities and other relevant bodies to share knowledge and information.
- 4.11. Meeting the targets set in this policy will help to improve tenant's comfort and reduce the risk of fuel poverty. The council will avoid systems that are difficult to use and support tenants to realise the benefits of their new homes by supplying information and training to minimise their energy bills.

5. Targets

- 5.1. All new projects to meet the following RIBA 2030 Climate Challenge – version 2 (2021) targets:

Operational Energy:	< 35 kWh/m ² /y
Embodied Carbon:	< 625 kgCO ₂ e/m ²
Potable Water Use:	< 75 Litres/person/day
Overheating:	25-28 °C maximum for 1% of occupied hours
Daylighting:	> 2% av. Daylight factor, 0.4 uniformity
CO ₂ levels:	< 900 ppm
Total VOCs:	< 0.3 mg/m ³
Formaldehyde:	< 0.1 mg/m ³

- 5.2. Monitor and report the amount of reused and recycled content for all construction materials used on site. Aim for reused and recycled content to be at least 20% by weight.
- 5.3. Monitor and report the amount reusable and recyclable content (at end of life) for all construction materials used on site. Aim for reusable content to be at least 50% by weight.
- 5.4. Aim for 50% of new material to hold certified EPD.

