

Further consultation - November 2022

#### Bristol local Plan Review

FURTHER CONSULTATION – NOVEMBER 2022



#### Net zero and climate

## Draft Policy NZC1: Climate change, sustainable design and construction

Overarching policy which frames the rest of the chapter.

Aims to ensure that new development mitigates its contribution towards the drivers of climate change including embodied and operational carbon emissions, and considers climate adaptation and mitigation.

Requires development to contribute to national and local climate objectives through measures including:

- Minimising energy demand through energy efficiency and maximising on-site renewable generation.
- Minimising embodied carbon and making efficient use of resources.
- Ensuring development is adapted to changes in local climate over its lifetime.
- Design which is flexible and adaptable.
- Efficient use of land and encouraging active travel or public transport use.

For major development (100+ dwellings), BREEAM communities assessments will be required.

## Draft Policy NZC2: Net zero carbon development – operational carbon

Concerned with the operational carbon emissions of new development, meaning the CO2 emitted through energy use once the development is occupied.

Net zero is achieved through a combination of:

- Energy efficiency;
- On-site renewable power generation equivalent to the development's energy needs over the course of the year; and,
- Where this cannot feasibly be delivered on site, energy offsetting payments.

#### SIMPLE - Draft Policy NZC2: Net zero carbon development – operational carbon cont.

Specific energy use standards are set for residential development.

For non-residential development, we are continuing to explore the evidence available locally and nationally to support a similar standard for non-residential development.

In particular, we are awaiting research from the UK Green Building Council which we hope will be available in time for the next stage of the local plan review.

In the meantime, the policy relies on the BREEAM approach set out in policy NZC1, applied only to major development at this time.

### Draft Policy NZC2: Net zero carbon development – operational carbon cont.

Also includes provisions for:

- An alternative route to compliance PassivHaus.
- System flexibility minimising energy demand at peak times; allocating space for internal/external battery storage; and vehicle-to-grid charging.
- A heating/cooling hierarchy connection to existing or new classified heat network where possible, and elsewhere incorporating renewable heat or communal renewable heating.
- A requirement to minimise cooling system demand through design, including orientation, internal heat generation and passive ventilation.
- A requirement for a recognised quality regime to be implemented from design through to handover.

# Draft Policy NZC3: Embodied carbon, materials and waste

Requires development to consider and reduce embodied carbon and other associated embodied environmental impacts by:

- Prioritising the renovation and retrofit of existing structures;
- Being designed efficiently to minimise quantity of materials required;
- Selecting high quality materials and systems which:
  - Have low embodied carbon;
  - Minimise the need for replacement.
  - Can be reused, recycled and disposed of sustainably at end of life; and
- Ensuring that new buildings are flexible and adaptable to future uses, reducing the need for future redevelopment.

# SIMPLE - Draft Policy NZC3: Embodied carbon, materials and waste

New major applications will be expected to achieve embodied carbon targets relative to scale of development.

Any shortfall will need to be fully justified and offset through financial contribution.

Also requires developers to consider, avoid and minimise the impact of:

- The global warming potential of any refrigerants used.
- Demolition and excavation waste.
- Use of tropical hardwoods.

# Draft Policy NZC4: Adaptation to a changing climate

Aims to ensure development in the city is designed to cope with the effects of global heating. Development should:

- Identify specific risks to inhabitants and the environment due to climate change.
- Utilise site and building level measures to be resilient to future climate change impacts and provide comfort, health and wellbeing of occupiers and the surrounding environment.

These measures include, but are not limited to:

- Minimising overheating;
- Reducing the urban heat island effect;
- Providing comfortable external and internal refuge areas;
- Conserving water supplies; and
- Minimising the risk and impact of flooding.

# Draft Policy NZC5: Renewable energy development

Supports renewable energy development across the city.

Proposals for the utilisation, distribution and development of new renewable energy capacity and energy storage, including large-scale freestanding installations, will be encouraged.

Avonmouth is noted as an area particularly suited to renewable energy generation, including on-shore wind power.

The potential impact of renewables on residential areas and on natural and historic assets areas need not be seen as a barrier to renewable energy development.