



Transition Bath is a charity whose aim is to build a sustainable future for Bath. Transition Bath would like to object to planning application 17/04338/FUL.

Summary

We would like to object on the grounds that the proposed CHP heating and hot water system is not a renewable technology and thus will not meet B&NES's Placemaking Plan's 10% carbon reduction target through renewables

We would also like to comment that although the cycling requirement exceeds B&NES's requirements we feel that a 1 in 3 provision is not high enough for student accommodation.

Detail

Although the planning application acknowledges the recent requirement from the adopted Placemaking Plan that all new developments of 10 or more dwellings reduce their carbon emissions by 10% more than Building Regulation through renewable technologies, we feel that the developers proposed use of CHP (Combined Heat and Power) is not a renewable solution to the requirement.

We consider CHP (Combined Heat and Power) not to be a renewable solution, for the following reasons:

- CHP consumes gas which is a non-renewable fossil fuel
- Although the use of CHP is up to 90% efficient, we feel that with the recent rapid decarbonisation of the grid and the need to start reducing the use of greenhouse gases in heating and hot water from 2030, CHP is not a long-term solution for reducing carbon emissions, and may actually increase carbon emissions

We feel that the developer should look at alternatives, for example roof top albeit limited solar PV, and the use of heat pump technology which when combined with a decarbonised national grid will deliver a much greater carbon reduction and is a better long-term solution. The developer points out that the majority of the heat requirement will be for hot water, and that heat pumps are not the most efficient way of heating hot water, we would however a high temperature heat pump would be a satisfactory solution. We would also find it an acceptable alternative if the fabric of the building was improved to reduce heat losses.

We also don't believe the developers unsubstantiated claim for solar PV that "*The technology tends to have a high capital cost per unit of carbon saved*"

We note that energy efficient air permeability levels of below 5 m³/h/m² @ 50Pa are targeted, but feel at this level in order to provide good air quality, MVHR should be included in the development. This is particularly important as this is dense student accommodation where it is likely students will be forced to open windows when the heating, ensuring the building underperforms its targeted Building Regulation heat losses once the building is in use. Could the developers confirm whether they have carried out an air quality analysis for the building for its proposed student use, and whether the proposed levels of air tightness would achieve good air quality?

Finally, if the developer could prove without doubt, which we think is unlikely, that a 10% reduction in carbon emissions through on-site renewables is impossible to deliver we might find an off-site solution acceptable.