

Appendix 2- Proposed Standard based on the UK Green Building Council's (UKGBC) definition and best practice in construction

The UK Green Building Council (UKGBC) define whole life net zero carbon as:

“when the amount of carbon emissions associated with a building’s embodied and operational impacts over the life of the building, including its disposal, are zero or negative”.¹

This means that throughout the whole lifecycle of a building, including its construction, the products and components used in construction, the operational energy use, during maintenance and at its end of life, there will be net zero carbon emissions.

Increasing efficiency of material use, improved construction practices and reducing operational demand should be prioritised, and the building must offset the remaining carbon impacts associated with its lifecycle.

Carbon offsetting through methods associated with exporting on-site renewable power/heat generation, the use of construction materials which capture carbon (e.g. through biogenic carbon sequestration in timber) and supporting on-site natural carbon capture (e.g. through tree or native hedge planting) should be considered ahead of off-site options.

The net zero carbon buildings framework sets out definitions and principles around two approaches to net zero carbon, which are of equal importance:

1. Net zero carbon – construction (1.1): “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.”
2. Net zero carbon – operational energy (1.2): “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-

¹ <https://www.ukgbc.org/wp-content/uploads/2019/04/Net-Zero-Carbon-Buildings-A-framework-definition.pdf>
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site and/or off-site renewable energy sources, with any remaining carbon balance offset.”

3. Net zero carbon – whole life (1.3) is also proposed at a high level, but further work will be needed to define the scope and requirements for this approach.