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# GLOSSARY OF TERMS



CREATING SUSTAINABLE NET ZERO ENVIRONMENTS

# CARBON TERMINOLOGY

## **GHG – Greenhouse gases**

GHG are gases in the earth's atmosphere that trap heat. They let sunlight pass through the atmosphere to heat the earth's surface, but they prevent that heat from leaving the atmosphere.

## **Carbon emissions**

Carbon emissions stem from the burning of fossil fuels and the manufacture of cement in the food industry, manufacturing of goods, materials, construction, roads or transportation.

## **Carbon Dioxide equivalent or CO2e**

The number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas (methane for example). CO2e allows groups of greenhouse gases to be expressed as a single number.

## **Zero carbon**

When a product or service produces zero emissions. For example a wind turbine produces no emissions and only produces electricity.

## **Embodied carbon**

The carbon footprint of a material throughout the supply chain. Using steel as an example, a calculation is made to know how much carbon has been released from the start of the process of making the steel to it landing on our factory floor – 'Cradle to Gate'

## **Operational carbon - Energy**

A term associated with the operational side of the building (Energy usage when in operation) such as heating, cooling, lighting etc.

## **Operational carbon - Water**

The operational carbon of water is the GHG emissions arising from water supply and waste water treatment for an asset in-use, over its life cycle.

## **Net zero carbon**

When the amount of carbon emissions associated with an individual, organisation or product is zero or negative, through the use of offsets or the net export of on-site renewable energy.

## **Net zero whole life carbon**

A 'Net Zero Embodied Carbon' asset is one where the sum total of GHG emissions and removals over an asset's life cycle are minimized, meet local carbon targets (e.g.kgCO2e/m2), and include additional offsets to equal zero.

## **Net zero operational - Energy**

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.

## **Net zero operational - Water**

A Net Zero Water asset is one where water usage has been minimised and the generated wastewater is treated and reused within the asset's boundary.

## **Carbon conscious**

A term we use to show that you care about your activities and the impact they have on our planet. You are actively taking steps to reduce your carbon footprint but haven't quite got there.

## **Lean approaches & tech - Be more lean:**

Use approaches to reduce emissions and manage demand during operation through fabric and servicing improvements and the incorporation of flexibility measures.

## **Clean technologies – Be more clean**

Exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly by connecting to district heating networks.

## **Green technologies – Be more green**

Maximise opportunities for renewable energy by producing, storing and using renewable energy on-site.

## **Monitor - Be seen**

Monitor, verify and report on energy performance through a post construction monitoring platform.

Doing the right thing with



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