Product Embodied Carbon Definition Statement

BEAMA's supported definition of product embodied carbon within the LCA boundary.

Freely available and accurate embodied carbon data will be required if we want a truly Net Zero built environment. However, we face a significant challenge in effectively utilising product embodied carbon information as there does not appear to be a single accepted definition of embodied carbon for products which industry can adhere to.

As a result, views on which stages within a life cycle assessment (LCA) fall under the banner of embodied carbon can differ greatly across the industry.

BEAMA is a trade association representing a cross section of manufacturers of energy-related products and services for the built environment, covering buildings and infrastructure. Following a comprehensive review of existing standards and policies, our members have collectively agreed to adopt the following embodied carbon definition for products:

We accept the boundaries of product embodied carbon for a life cycle assessment to be A1-A3, according to standard BS EN 15978:2011 Sustainability of construction works – Assessment of environmental performance of buildings – Calculation method.*

Our members agree that this is where manufacturers of electro-mechanical products have the most impact and can be confident that the data provided will be accurate and comparable. This definition is not to imply that the other stages within an LCA are not important, but rather showcase the stages where product information can be uniformly provided by manufacturers without project specific details impacting the data output.

We aim to adopt this definition but remain flexible should further market information come to light, or a legal definition be put in place.

If you wish to discuss this position or offer an alternative, please feel free to contact us. Alternatively, you can read more about embodied carbon data for mechanical, electrical, and plumbing (MEP) products here.

* Note that this definition may also be known in industry as upfront carbon.