

Katie Eyles

Sector lead: Accelerating net zero buildings



What we mean when we say embodied carbon



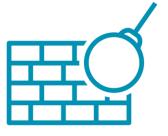
Building materials



Construction



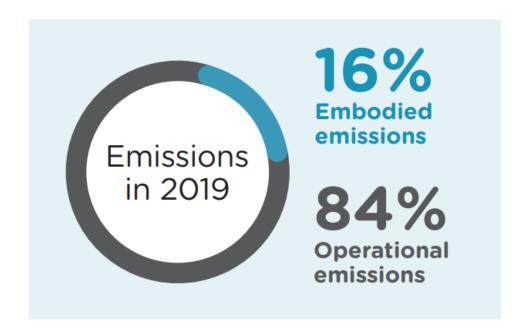
Repairing, refurbishing, replacing

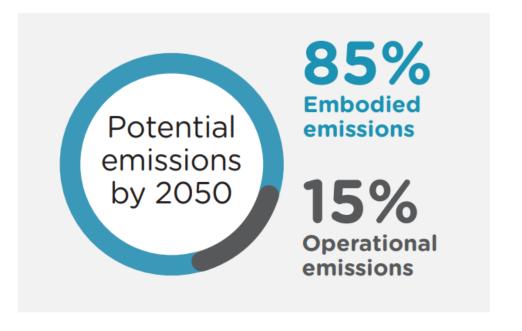


End of life



It's an urgent problem





Comparison of embodied emissions and operational emissions in 2019 and forecast for 2050.

It's a complex problem



The industry is fragmented, making comparisons between buildings problematic.



There's varied understanding, it's complex and time consuming.

200+

Individuals

150+

Organisations



Decision makers

Developers, owners, tenants



Project teams

Architects, engineers, quantity surveyors, construction, LCA experts



Influencers

Policy makers, investors, industry peaks, standards bodies, academics



Supply side

Product manufacturers



Proposed embodied carbon methodology



Drive action to **urgently reduce** embodied emissions.



Focus on **measuring**, **verifying**, **comparing** and **disclosing**.



Start by solving well-defined problems **now**, rather than waiting to solve everything.



What's included?

Upfront carbon

A1-3

Product stage

- Raw material supply
- A2 Transport
- A3 Manufacturing

A4-5

Construction process stage

- A4 Transport
- Construction installation process

Base building

- Main structure of building
- Major mechanical services and vertical transport

Re-used materials will be assigned zero emissions

Emissions data

- Carbon footprint methods: process vs inputoutput vs hybrid.
- Stakeholders strongly preferred verified process data for NABERS framework, e.g. Environmental Product Declarations (EPDs).
- NABERS will provide conservative default emission factors, where EPDs aren't available.



What can be rated



New buildings



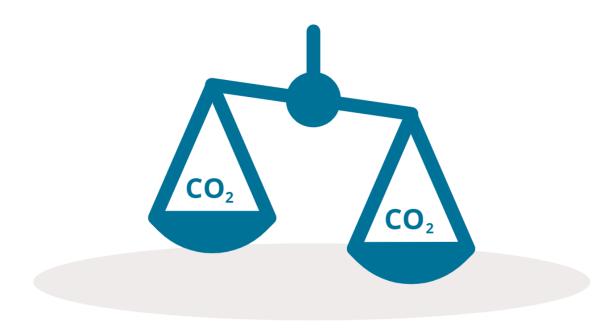
Major refurbishments



Any building type



Balance between operational energy use and embodied carbon



When can I use it?





Thank you

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