

ESG - 3 Pillars



WHAT IS EMBODIED CARBON?

The total CO₂ emitted to create a building.

Extraction of Raw Material



Processing Stage



Transport to Site



Construction Stage



DRIVERS OF EMBODIED CARBON



CASE STUDY: EMBODIED CARBON RESULTS **A1-A5 (BASED ON MMCD STUDIES)



SEMI
DETACHED
HOUSE

110m²

Total *EC/m² = 340
KG/CO₂e

Total EC/Unit =
37,400 KG/CO₂e



TERRACED
HOUSE

110m²

Total EC/m² = 297
KG/CO₂e

Total EC/Unit =
32,670 KG/CO₂e



APARTMENT
(ON GRADE)

65 Units

Total EC/m² = 435
KG/CO₂e

Total EC/Unit =
37,800 KG/CO₂e



SITE
WORKS

High Density

Medium Density

Low Density

35 KG/CO₂e/m²

75 KG/CO₂e/m²

120 KG/CO₂e/m²

*EC = Embodied Carbon

Good ground conditions. Timber frame construction. Clay Bricks. Built to A2 standard. Air to water heat pump. Posi Joist system. 50% brick / 50% render. Double glazed uPVC windows. Includes kitchen, wardrobes and tiling/ fitout of bathrooms.

Apartment on Grade with good ground conditions. Pad foundation. Metsec frame. In-situ floors, precast columns. Double Glazed uPVC windows. High % of reinforcement procured is recycled. C32/40 Concrete with GGBS content.

Please note that this is subject to change depending on the ground conditions of the site. The case studies used to compile our results had moderate / good ground conditions.

**A1 = Raw Materials Supply, A2 = Transport to Manufacturer, A3 = Manufacturing, A4 = Transport to Site, A5 = Installation Stage

SOME THINGS TO LOOK OUT FOR IN 2026...



Mandatory carbon reporting for publicly funded project.



Developers who don't meet carbon standards will be locked out of Public procurement.



Whole Life Carbon Limits.



Potential planning objections due to non-compliance.



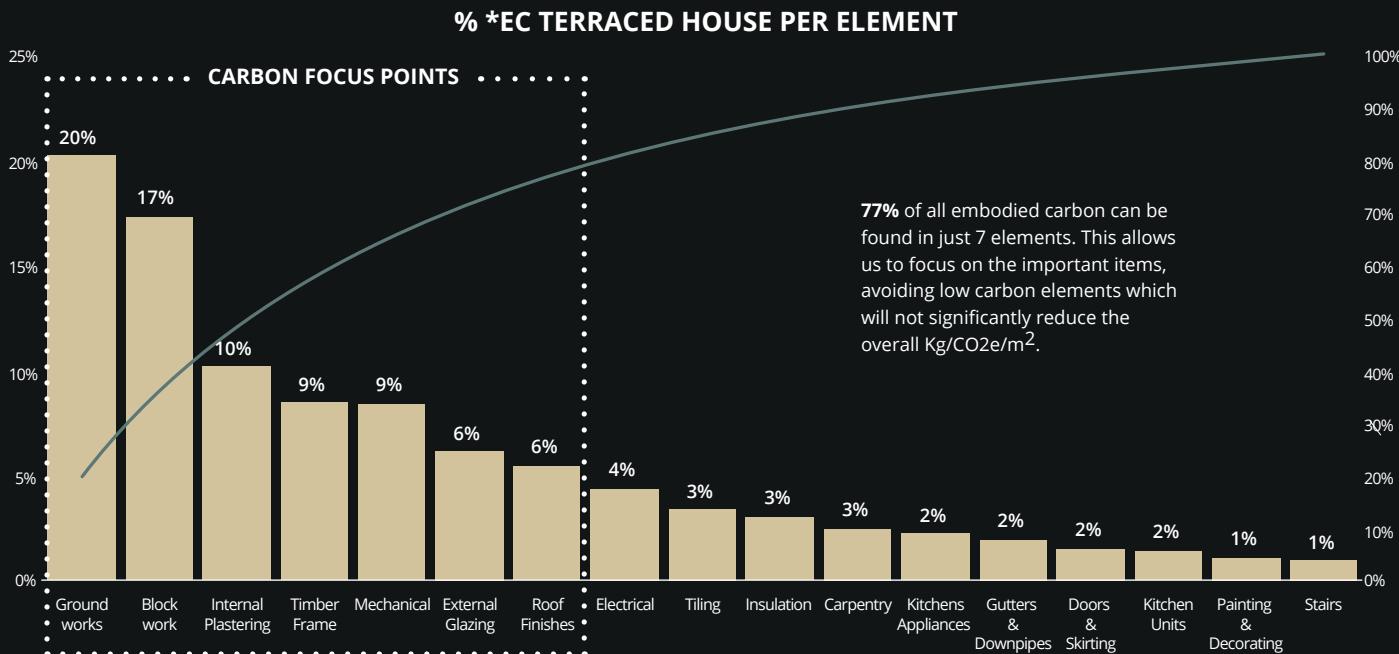
Stranded Assets Risk.



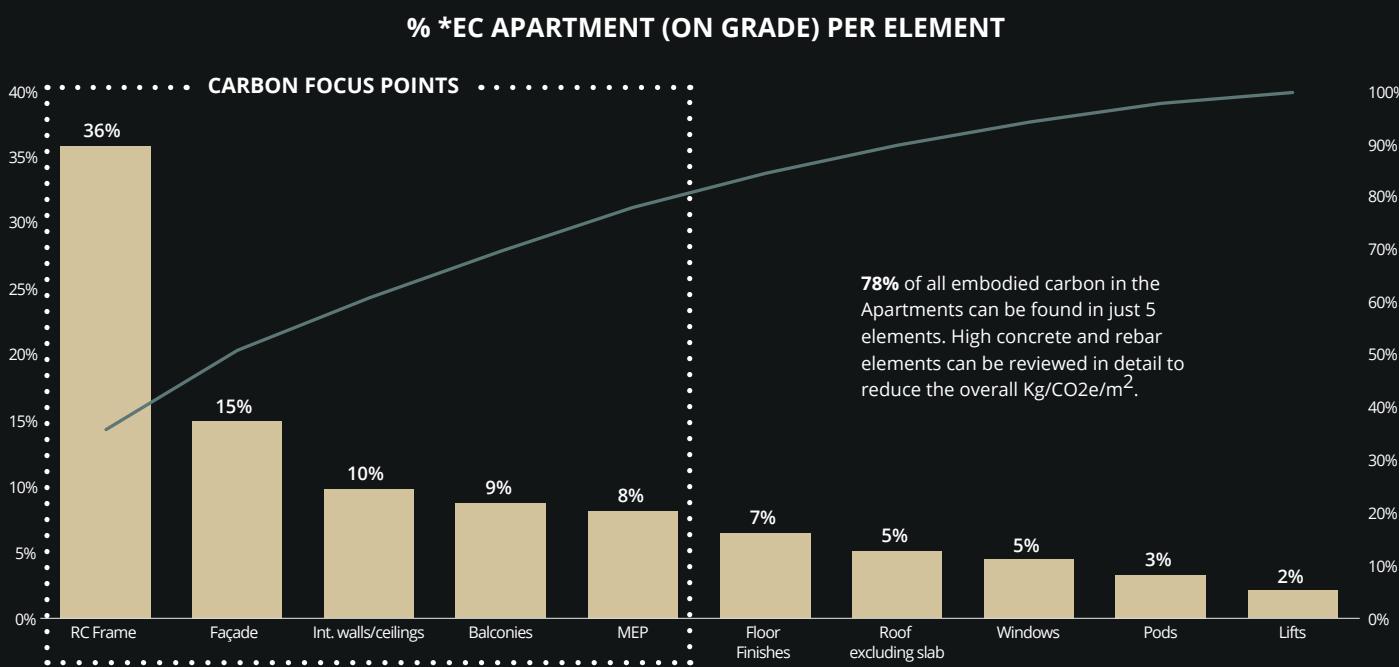
Those who do not meet the standards may have increased funding issues.

CARBON HEAT MAP AND ELEMENTAL EMBODIED CARBON STUDY
SEMI DETACHED HOUSE

280 - 360 KG/CO2E/M ²	360 - 400 KG/CO2E/M ²	400+ KG/CO2E/M ²
POSITIVE EMBODIED CARBON RANGE	SOME ELEMENTS OF THE BUILDING SHOULD BE REVIEWED TO REDUCE CARBON	PROPOSED BUILDING IS HIGH IN *EC


APARTMENT ON GRADE

400 - 460 KG/CO2E/M ²	460 - 480 KG/CO2E/M ²	480+ KG/CO2E/M ²
POSITIVE EMBODIED CARBON RANGE	SOME ELEMENTS OF THE BUILDING SHOULD BE REVIEWED TO REDUCE CARBON	PROPOSED BUILDING IS HIGH IN *EC



*This is a high level indication only. Carbon will vary depending on the scheme.



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