

## ESG - 3 Pillars



### Legislative

Manage legislative sustainability requirements such as EU Taxonomy alignment, SFDR reporting and EPCs.



### Commercial

Create ESG KPIs, assign and track responsibility for submitting and reviewing important data and workflows. Manage upgrade projects and track evidence for future due diligence and auditing.



### Ethical

Measure performance against predefined social and governance targets. Create bespoke social indicators and scoring systems to manage UN SDGs and other worthy pursuits.

### WHAT IS EMBODIED CARBON?

The total CO<sub>2</sub> emitted to create a building.

#### Extraction of Raw Material



#### Processing Stage



#### Transport to Site



#### Construction Stage



### DRIVERS OF EMBODIED CARBON

#### Concrete



#### Steel / Rebar



#### Brick



#### MEP



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

	SEMI DETACHED HOUSE	110m <sup>2</sup>	Total *EC/m <sup>2</sup> = 340 KG/CO <sub>2</sub> e	Total EC/Unit = 37,400 KG/CO <sub>2</sub> e
	TERRACED HOUSE	110m <sup>2</sup>	Total EC/m <sup>2</sup> = 297 KG/CO <sub>2</sub> e	Total EC/Unit = 32,670 KG/CO <sub>2</sub> e
	APARTMENT (ON GRADE)	65 Units	Total EC/m <sup>2</sup> = 435 KG/CO <sub>2</sub> e	Total EC/Unit = 37,800 KG/CO <sub>2</sub> e
	SITE WORKS	<div> <div>High Density</div> <div>Medium Density</div> <div>Low Density</div> </div> <div> <div>35 KG/CO<sub>2</sub>e/m<sup>2</sup></div> <div>75 KG/CO<sub>2</sub>e/m<sup>2</sup></div> <div>120 KG/CO<sub>2</sub>e/m<sup>2</sup></div> </div>		

\*EC = Embodied Carbon

### MORE INFORMATION

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.



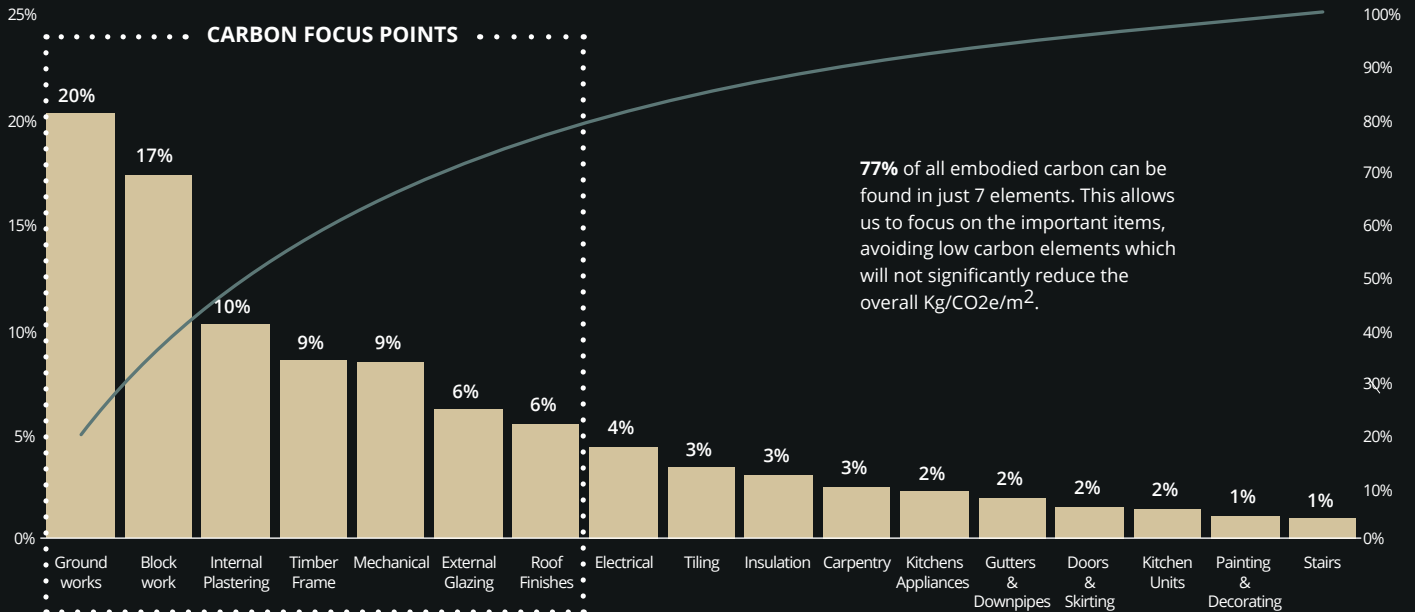
Those who do not meet the standards may have increased funding issues.

**CARBON HEAT MAP AND ELEMENTAL EMBODIED CARBON STUDY**

**SEMI DETACHED HOUSE**

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

**% \*EC TERRACED HOUSE PER ELEMENT**

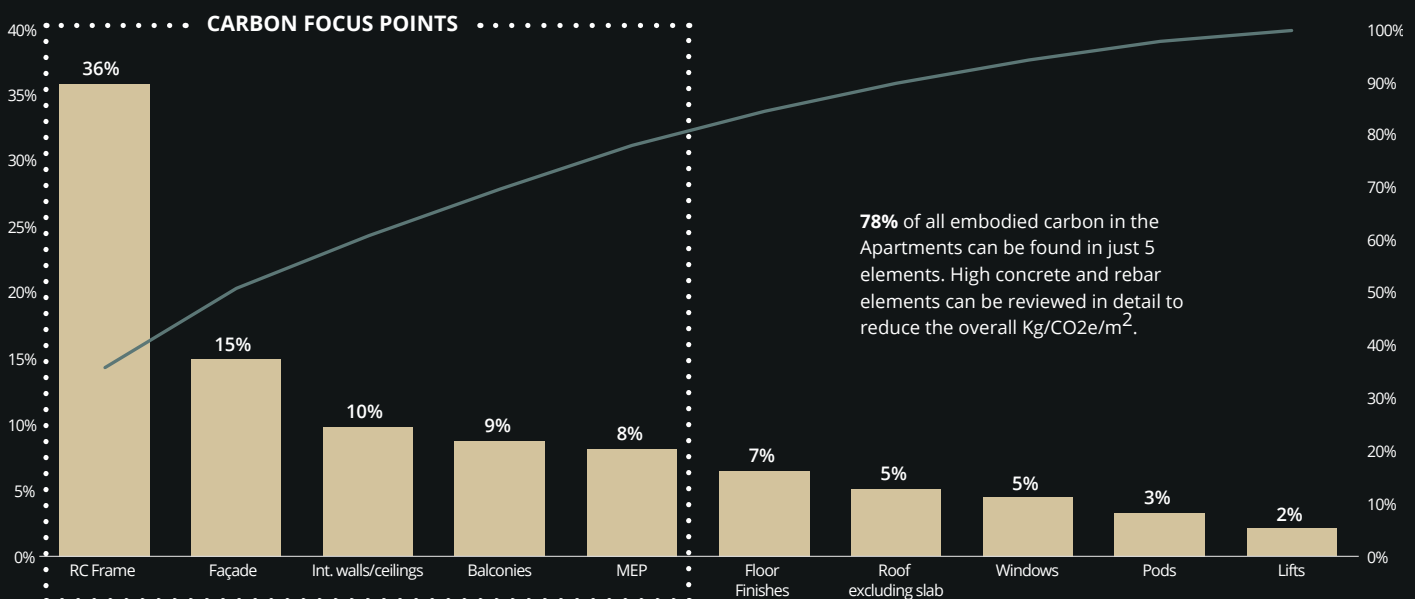


\*EC = Embodied Carbon

**APARTMENT ON GRADE**

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

**% \*EC APARTMENT (ON GRADE) PER ELEMENT**



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



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