



Structural Engineers

Immediate Actions:	Progress by 2025:	Progress by 2030:
Implement NZC skills and training plans supported by Professional Institutions, with reference to the Climate Framework, to establish carbon literacy across all students and staff.	High levels of carbon competence amongst Structural Engineers, with knowledge embedded in CPD and PI Membership criteria (i.e. structural engineers able to offer low carbon solutions as part of a standard scope of works).	All Structural Engineers are key change agents, challenging project teams and clients to achieve lowest carbon design strategy at each RIBA stage.
Build capacity in undertaking embodied carbon assessments using industry tools to elevate competencies and enhance quality of structural embodied carbon assessments.	Elevated industry competence and skills in embodied carbon assessment of structural designs across all building types.	Low embodied carbon structural design and specification becomes standard practice.
Undertake and present embodied carbon estimates for different structural solutions at concept design stage on all projects.	Embodied carbon assessments carried out for structural design on all projects through all RIBA design stages as one of the primary decision tools in design and procurement. Contribute to achieving industry targets for embodied carbon intensity.	
Promote and learn from existing pathfinder projects adopting low carbon construction materials at scale.	Innovate structural design to embrace low carbon construction materials. Support industry to work through delivery challenges in order to mainstream adoption.	
Enable market circularity through training structural engineers in conducting pre-demolition audits, identifying re-use and retention opportunities, and designing for disassembly (i.e. the future re-use of building products and materials).	On all projects, proactively identify opportunities to utilise re-used structural elements and design for disassembly, and advocate for maximum re-use of existing building structure / substructure. (if structures must be demolished, advocate for controlled deconstruction over demolition to maximise reuse potential of structural components).	Re-used material usage widespread.
Work collaboratively to challenge industry norms, reduce over-specification and enable leaner design. Proactively propose solutions to the design team and client, that maximise efficiency of structural configuration (well-proportioned beams, short spans, direct axial load paths, etc) on all projects.	Improved industry specifications and standard practices, including better understanding of how industry guidance can be applied to achieve best outcomes.	