

Building Services Engineers

Immediate Actions:	Progress by 2025:	Progress by 2030:
Implement Net Zero Carbon (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 Building Services Engineers, with knowledge embedded in CPD and PI Membership criteria.	All Building Services Engineers are key change agents, challenging project teams and clients to achieve lowest carbon design strategy at each RIBA stage.
Build capacity in undertaking detailed operational energy assessments to elevate competencies and improve quality of energy assessments.	Elevated industry competence and skills in operational energy forecasting, across all building types.	Leading expertise in operational energy forecasting, across all building types.
Proactively work with developers and building owners to carry out Post-Occupancy Evaluation on all projects delivered in last 5-years to evaluate performance, rapidly improve industry datasets, generate feedback loops and support the formation of new performance-based rating systems.	Support development of improved industry datasets and evidence base for performance outcomes.	
<p>Adopt and embed a “design for performance” culture across all project types and scales:</p> <ul style="list-style-type: none"> • Work with developers to establish energy intensity targets in project briefs for all projects in line with industry / sector targets. • Carry out operational energy assessments to an appropriate level of detail on all projects through all RIBA Stages, to inform design, procurement, handover and operation. • Implement effective handover procedures on all projects in line with Soft Landings. • Advocate for the measurement of in-use energy monitoring and performance and support initial optimisation of buildings in first 2 years post-handover. 	<p>Publish results of operational energy and Whole Life Carbon (WLC) assessments on an anonymised basis, comparing design calculations with verified operational performance to support industry development.</p> <p>Contribute towards achieving energy intensity and embodied carbon targets for majority of projects, with as built and in-use verification in place to limit any performance gap.</p>	Performance gap eliminated.
Improve understanding of WLC impact of typical MEP installations, build capacity in undertaking WLC assessments, and push supply chains to provide EPDs (EPD A-D to EN15804 & externally verified) and improved embodied carbon data.	Carry out embodied carbon assessments of building services systems on all projects through all RIBA stages, to inform design and procurement, and contribute to achieving industry targets for embodied carbon intensity.	Low embodied carbon MEP design and specification becomes standard practice.
Adopt and support the development of industry project targets and commit to presenting design options for how these can be achieved on all projects.	Ensure all designs are as a minimum ‘net zero ready’ - with planned upgrade pathways identified to avoid significant future retrofit and minimise WLC.	
Commit to identifying the lowest WLC approach for every project.	Champion the lowest WLC approaches on all projects.	
Work collaboratively to challenge industry norms, reduce over-specification and enable leaner design.	Improved industry specifications and standard practices, including better understanding of how industry guidance can be applied to achieve best outcomes.	