

Mace appoints low carbon structural engineer to lead client carbon reduction targets

3 years ago



Mace, the global consultancy and construction company, has appointed its first low carbon structural engineer, Jessica Lovell, to lead the organisation's client carbon reduction target.

Mace has pledged to reduce client carbon emissions by 1 million tonnes, as part of its 2026 business strategy and eliminating the use of diesel on all its sites by 2026.

Jessica joins Mace from Robert Bird Group, where she set up the company's sustainability steering group and was instrumental in developing Robert Bird's net zero carbon agenda.

At Mace, Jessica will lead clients' embodied carbon reduction strategies, completely transforming the carbon footprint of the projects they deliver.

Mace has achieved net zero carbon as a business at the end of 2020, with a 50% carbon reduction and a 50% carbon offset. In 2021, it has moved towards a further 10% carbon reduction target year-on-year to 2026

To help clients reduce carbon emissions, Mace has spearheaded the use of low carbon concrete cassettes as a construction methodology. Using a replacement for cement, in partnership with Cemfree, DB Group and Innovate UK funding, Mace can reduce the embodied carbon of the concrete by as much as 75%.

Using a Construction to Production approach, Mace has designed and tested the first prototype cassettes at Mace's offsite factory in Brandon.



The project has also allowed for a significant reduction in carbon for the steel used in a floorplate, helping to generate improvements in overall embodied carbon efficiency of a project, whilst maintaining the same structural properties.

The cement free cassettes will be used on some of Mace's largest construction sites helping clients revolutionise the way they reduce the embodied carbon of their projects.

Jessica Lovell, Low Carbon Structural Engineer at Mace: "In modern buildings a large portion of carbon sits within the structure. If we want to drive meaningful change, it's crucial that we engage not only our clients and their design teams, but also our supply chain partners early on. Significant carbon improvements can be made by asking the big questions early on. Depending on the project you could achieve up to a quarter of carbon savings. The majority of our clients already have a net zero strategy in place, and with our continued commitment to reduce the carbon in their assets, we are turning actions into tangible results."

Andrew Jackson, COO for Construction at Mace: "Jessica's expertise will transform the way we approach embodied carbon reduction strategies on client projects. We set ourselves ambitious targets to 2026 and we have already been making significant progress towards our goals. I look forward to Jessica taking our clients a step further in their net zero carbon journeys."

Image credit: Mace