Letter to the ‘The Structural Engineer’ – October 2012

Dear Editorial

The article *'A comparative embodied carbon assessment of commercial buildings'* in the October issue of *The Structural Engineer* concludes with *'...optimised structural steel solutions yielded the lowest cost and carbon';* not surprising when you consider that the article is funded and written by the steel industry. How such claims can be made is questionable when the authors themselves write *'embodied carbon assessment is in its infancy'*. On a number of fronts the peer review process and impartiality of the Institution has failed and the article should be withdrawn or re-published as an advertisement.

For all the building types studied, whether you are designing a warehouse, supermarket, school, office or mixed-use structure the claim is that steel generates the lowest embodied carbon emissions when compared to timber or concrete frame. The use of the World Steel Association data is key is delivering these positive results and in some respects the global steel industry should be praised for its re-cycling record (but not for ship breaking in Bangladesh). However, the praise stops there because the author's choice of competing material carbon emissions is at best transparent, at worst skewed and irrelevant.

Our industry is one of the most significant specifiers of engineering materials, as engineers we should constantly remind ourselves and our clients of the impact of our design decisions (each structural engineer is probably responsible for instructing some 2500tCO2 of build each year). Our profession needs balanced reporting and impartial research in the area of embodied carbon if we are to become fluent in sustainable design. My fear is that those industries with the largest lobbying budgets will lead us astray.

Yours faithfully

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