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Award-winning paper in 2018.

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Announcement

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Award-winning paper in 2018

Papers published in *Engineering Sustainability* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 4 October 2019, ICE president Andrew Wyllie presented an award to the following paper published in *Engineering Sustainability* in 2018. The editorial panel nominated their best papers and an awards committee chaired by Robert Armitage allocated the awards.

Richard Trevithick Prize

The Richard Trevithick Prize, presented for the best paper published in *Engineering Sustainability*, was awarded to Giesekam *et al.* (2018).

Abstract

Motivated by national greenhouse gas (GHG) emissions budgets, the UK construction industry is pursuing reductions in emissions embodied

in buildings and infrastructure. The current embodied GHG emissions benchmarks allow design teams to make a relative comparison between buildings and infrastructure but are not linked to sector or national GHG emissions reduction targets. This paper describes a novel model that links sector-level embodied GHG emissions estimates with project calculations. This provides a framework to consistently translate international, national and sector reduction targets into project targets. The required level of long-term GHG emissions reduction from improvements in building design and material manufacture is heavily dependent on external factors that the industry does not control, such as demand for new stock and the rate of electrical grid 'decarbonisation'. A scenario analysis using the model suggests that, even if external factors progress along the better end of UK government projections, current practices will be insufficient to meet sector targets.

REFERENCE

Giesekam J, Barrett J and Taylor P (2018) Scenario analysis of embodied greenhouse gas emissions in UK construction. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **171**(4): 178–190, <https://doi.org/10.1680/jensu.16.00020>.