

Julian Allwood (UK) [\(Bio\)](#)

Julian Allwood is Professor of Engineering and the Environment at the University of Cambridge and directs the Use Less Group. Uniquely, his research aims to articulate a pathway to zero emissions based on technologies that already exist at scale. This directs attention to eliminating process emissions and efficient electrification. A particular focus of his research is to identify opportunities for business growth compatible with real zero emissions. This has led to many patents and several spin-out companies, two of which (ReClinker Ltd., which recycles cement at scale without emissions and DeepForm Ltd, which reduces the emissions of car body manufacturing by 30%) secured their second rounds of venture funding (totalling £11m) in 2026.

From 2019-24 he was director of UK FIRES – a £5m industry and multi-university programme aiming to explore all aspects of Industrial Strategy compatible with delivering zero emissions by 2050. ‘Absolute Zero’, the first publication of UK FIRES continues to attract widespread attention following a full debate in the House of Lords in Feb 2020 and is one of the most accessed resources ever released by the University of Cambridge. The report has led to technical, strategic and political innovation aligned to reducing material demand.

Julian was a Lead Author of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) with a focus on mitigating industrial emissions. He is an Honorary Fellow of the Institution of Materials, Minerals and Mining, a Fellow of the International Academy of Production Engineering (CIRP) and served as chairman of its metal forming section. He is a member of the UK’s Energy Research Partnership and for ten years was joint editor-in-chief of the Journal of Materials Processing Technology. He was elected as a Fellow of the Royal Academy of Engineering in 2017 and in 2021 was awarded the triennial Japan Society for Technology of Plasticity International Prize for Research and Development in Precision Forging the highest honour for research in metal forming. In 2025 he was appointed as a member of the Science and Technology Advisory Committee of the UK Government’s Department for Energy Security and Net Zero.

Julian’s career began with 10 years’ work for Alcoa on flat rolling, before academic positions at Imperial College and Cambridge. From 2009-13 he held an EPSRC Leadership Fellowship, to explore Material Efficiency as a climate mitigation strategy – delivering material services with less new material. This led to publication in 2012 of the book “Sustainable Materials: with both eyes open” which can be read online at www.withbotheyesopen.com and was listed by Bill Gates as “one of the best six books I read in 2015.” His second book, “A Safe Climate, in Good Faith”, written with Andrew Davison the Regius Professor of Divinity at Oxford, was published by Cambridge University Press in January 2026.

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