



In this new seminar series we invite cross-disciplinary discussion of environmental despoliation and the policy responses.

Date and Time: 6 October 2021, 2-3pm (BST)



Prof. JULIAN ALLWOOD

Cambridge University, UK FIRES

Closing the Rhetoric-Action Gap on Climate Mitigation

Join our free dual delivery seminar on:

Zoom: <https://bruneluniversity.zoom.us/j/4624210504>

Meeting ID: 462 421 0504 Passcode: 6291230945

Campus: Brunel University, Marie Jahoda 117

Those attending on campus, RSVP to gareth.dale@brunel.ac.uk

Moderator: Gareth Dale, Brunel University

ABSTRACT

We are in an era of false hope on climate mitigation: Countries worth 70% of the world's GDP have pledged to reach zero emissions by 2050 or 2060 but none have a credible delivery plan yet. Most rhetoric today and in the past about mitigation has focused on new energy infrastructure technologies (CCS, Hydrogen, SMR nuclear, negative emissions technologies etc.) but there is no longer time left to deploy them at sufficient scale. Climate policy so far has largely been based on scenarios where energy demand is assumed, and an imaginary supply-side solution is described that would meet this level of demand. In reality, based on recent history and trends of past deployments, we are entering a period of supply restraint - but Covid has shown us that we can adapt to living differently with today's technologies more readily than previously thought. Based on the analysis of the UK FIRES programme, we can now anticipate the potential for growth in providing services differently while requiring less energy - whether this is via new approaches to shared transport, life-extension as the mainstream activity of manufacturing and construction, and much more. The key policy mechanism that has driven mitigation to date and which will drive it in future is regulation, and we can anticipate the forms this must take to reach zero emissions. Investors and clients are also of increasing importance in driving change, and we are likely to see a rapid shift from discussion of hypothetical future actions that "reduce" emissions, to short-term widely deployable actions that move us rapidly enough to zero emissions.

BIOGRAPHY

Julian Allwood is Professor of Engineering and the Environment at the University of Cambridge. He worked for 10 years for Alcoa on flat rolling, before academic positions at Imperial College and Cambridge. His research group develops new manufacturing technologies for metals and strategies to mitigate climate change. 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.withbotheyeyesopen.com and was listed by Bill Gates as “one of the best six books I read in 2015.” 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, 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. From 2019-24 he is 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 attracted widespread attention including a full debate in the House of Lords in Feb 2020, and has led to a string of other reports, research and impact.

SUSTAINABILITY POLITICS

seminar series

upcoming seminars

19 October 2021 Shona Paterson (Brunel University, Climate Social Science)

Technological Innovation or Social Change? A Battle for the Ocean

25 November 2021 Lorna Anguilano (Brunel University, Applied Mineralogy)

Sustainable Materials Development in Renewable Energy and Aquaculture

7 December 2021 David McDermott Hughes (Rutgers University, Anthropology)

Book launch: *Who owns the wind? Climate crisis and the hope of renewable energy* (Verso, Oct 2021)

January 2022 Olwenn Martin (Brunel University, Environmental Science)

Climate and Chemicals: Connections and Consequences.

February 2022 Alf Hornborg (Lund University, Human Ecology)

Dismantling the Machine: Rethinking Technology in the Anthropocene

February 2022 Ximena Schmidt (Brunel University, Chemical Engineering)

March 2022 Evina Katsou (Brunel University, Environmental Engineering)

22 March 2022 Eva Giraud (University of Sheffield, Sociology)

Is it Vegan? Ethical enrolment and exclusion in digital food systems

April 2022 Wim Carton (Lund University, Human Geography)



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