



**Joint GSI Policy Network and EEIST Project Lecture by Simon Sharpe  
Thursday 4th March 2021 12:30-13:30 (GMT) on Zoom**

The global economy needs to be decarbonised five times faster over the coming decade than at present, to meet the international community's goals for avoiding dangerous climate change. Whether we manage this will depend not only on what policies governments put in place, but also on the more fundamental question of how they make policy decisions. Many of the economic principles, models, and theories used by governments to inform decision-making are applicable only to marginal change in contexts of equilibrium. But the challenge of global decarbonisation, as the Intergovernmental Panel on Climate Change has set out, is to bring out rapid and deep system transitions in energy, industry, land use, transport, and the built environment, on an unprecedented scale. This requires a different approach to decision-making. As a recent update to the UK government's official guide to policy appraisal recognised, decision-making in contexts of transformational change must involve consideration of system dynamics, feedbacks and tipping points.

The application of complexity science to economics gives us a new body of theory on which to build. Studies of rapid technology transitions of the past show how this can be put into practice. Simon Sharpe will discuss how this new understanding has significant – and hopeful – implications for both policy and diplomacy.

***“Deciding how to  
decide, to accelerate  
low carbon transitions”***

Simon Sharpe is Deputy Director of Policy Campaigns at the UK Cabinet Office COP26 Unit. COP26 is the international climate change conference that the UK will host in November 2021. He has previously worked as head of private office to the Minister for Energy and Climate Change, and served as a diplomat for ten years with postings in Beijing and Delhi.



ECONOMICS OF ENERGY INNOVATION  
AND SYSTEM TRANSITION