

# The UK's transition to a low carbon economy: progress so far and challenges ahead

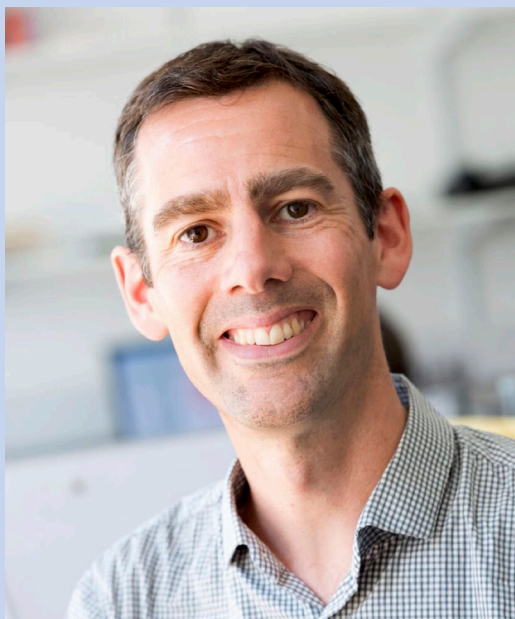
Wednesday, 10<sup>th</sup> April 2019, 12 pm to 1 pm

HG F 33.1, ETH Zurich, Rämistrasse 101, 8092 Zurich

In common with many other countries, the UK is implementing a transition to a more sustainable, low carbon energy system. The UK's greenhouse gas emissions have already fallen 43% between 1990 and 2017, and low carbon technologies now generate over 50% of the UK's electricity. Under the Climate Change Act, which was passed in 2008, there are legally binding targets for further emissions reductions - including the requirement for an 80% reduction in emissions by 2050. The government has recently launched a review of this long-term goal in the light of the Paris Agreement and IPCC 1.5 degrees report. This could lead to the UK adopting a 'net zero' emissions target later this year. But there is a long way to go. The government's independent advisers, the Committee on Climate Change, have repeatedly argued that current policies are nowhere near sufficient to deliver an energy system that meets medium and long-term targets. Most of the reductions so far have come from the power sector, whilst emissions from other sectors (particularly transport and buildings) have remained relatively flat.

This talk will discuss the UK's low carbon transition so far. It will explain some of the reasons for the UK's rapid progress with reducing emissions so far. It will discuss some of the challenges of achieving further reductions to meet future targets, whilst also taking into account other energy policy goals such as affordability, security and economic development. The talk will explore how these challenges could be overcome, including the role of policies to support low carbon innovation. It will conclude with some thoughts on the implications of the IPCC 1.5 degrees report for future UK policy.

Jim Watson is Professor of Energy Policy at the UCL Institute for Sustainable Resources. He joined UKERC as Research Director in February 2013, and has been UKERC's Director since January 2015. He trained as an engineer at Imperial College London and has a PhD in science and technology policy from University of Sussex. Before joining UCL in 2018, he spent 20 years at SPRU, University of Sussex - including as Director of the Sussex Energy Group from 2008 to 2013.



His research has focused on range of energy, climate change and innovation policy issues. His recent outputs include co-edited books: *New Challenges in Energy Security: The UK in a multipolar world* (Palgrave, 2013; with Catherine Mitchell) and *Global Energy: Issues, Potentials and Policy Implications* (Oxford University Press, 2015; with Paul Ekins and Mike Bradshaw).

He frequently advises UK government departments and other national and international organisations. He was an advisor to the UK Government Office for Science Foresight project on energy (2007-08), and has been a Specialist Adviser with three UK Parliamentary committees. He has extensive international experience, including over ten years working on energy scenarios and energy innovation policies in China and India. In 2008, he spent three months as a Visiting Scholar at the Kennedy School of Government, Harvard University. Jim is a judge for the Queens Awards, a member of the BEIS fossil fuel price assumptions panel and a member of the strategic advisory group for the Global Challenges Research Fund.