

## UK Electricity Market Reform and the Energy Transition: Emerging Lessons

**EPRG Working Paper** 1817

Cambridge Working Paper in Economics 1834

## Michael Grubb and David Newbery

Abstract The 2013 Electricity Market Reform (EMR) was a response to problems of delivering reliability with a growing share of renewables in its energy only market. Four EMR instruments combined to revolutionise the sector; stimulating unprecedented technological and structural change. Competitive auctions for both firm capacity and renewable energy have seen prices far lower than predicted and the entry of unexpected new technologies. A carbon price floor displaced coal, whose share fell from 46% in 1995 to 7% in 2017, halving CO2. Renewables grew from under 4% in 2008 to 22% by 2017, projected at 30+% by 2020 despite a political ban on onshore wind. Neither the technological nor regulatory transitions are complete, and the results to date highlight other challenges, notably to transmission pricing and locational signals. EMR is a step forwards, not backwards; but it is not the end of the story.

**Keywords** Electricity market design, capacity auctions, renewables support

**JEL Classification** L94, D44

Contact dmgn@cam.ac.uk
Publication June 2018

Financial Support Support from MIT CEEPR is gratefully acknowledged.

A fuller and earlier version of this paper was published

as CEEPR WP 2018-4 at

http://ceepr.mit.edu/files/papers/2018-004.pdf

www.eprg.group.cam.ac.uk