Phil Summerton Abstract

To better understand the socio-economic consequences of a low-carbon transition, a hybrid modelling approach that encompasses partial or whole energy systems modelling within the framework of a sectorally and regionally disaggregated economic modelling approach provides policy-relevant insights. This is the approach often applied by Cambridge Econometrics through the combination of its macroeconomic models, E3ME and MDM-E3, with detailed energy models. Recent and relevant examples of research undertaken using this approach will be presented. Our findings have consistently shown that detailed differences between energy-using technology solutions to the low carbon transition, when applied in combination with a modelling framework that describes the heterogeneous structure and characteristics of economies, can have profound implications for policy-making.