



Political ideology and public views of the energy transition in Australia and the UK

EPRG Working Paper 2106

Cambridge Working Paper in Economics 2126

**Zeynep Clulow, Michele Ferguson,
Peta Ashworth and David M Reiner**

The growing consensus surrounding the need for effective mitigation to achieve an ambitious temperature target has secured renewable energy sources and other low-carbon energy technologies a central place in national energy and climate policy debates. However, while the deployment of renewable energy sources has rapidly increased in recent years, this has not been the case for other low-carbon options such as carbon capture and storage (CCS). Efforts to explain the energy transition increasingly emphasise the importance of public acceptance in facilitating, or obstructing, the deployment of different energy technologies.

Given the highly political nature of energy policy, there are strong grounds for expecting that public attitudes towards energy technology are influenced by political orientation. On a left-right continuum, left-of-centre parties tend to ascribe greater value to the environment vis-à-vis competing interests than those on the right. Left-leaning individuals also tend to be more supportive of government intervention in the economy, which is typically needed for the large-scale deployment of low-carbon energy technologies, at least in the initial deployment stages. We therefore propose that left-leaning individuals are likely to be more supportive of renewable energy technologies and phasing out fossil-fuel energy compared to right-leaning individuals. The relationship is less determinate for more controversial low-carbon technologies such as nuclear energy and CCS as the potential for environmental risks such as leakage are presumably more concerning for left-leaning individuals who are generally more environmentally oriented.

We evaluate the influence of political orientation over public attitudes towards energy technology by comparing the cases of Australia and the UK. Despite both countries being parliamentary democracies and advanced industrialised economies, they have followed very different paths of energy transition. While both have pledged to contribute to global mitigation efforts by deploying more low carbon energy sources, the UK has adopted significantly more ambitious mitigation targets and realised a subs-



tantially larger (around three-fold) increase in its share of renewable to total energy generation compared to Australia.

The politics of energy transition over the last 10-15 years also show similar divergences. In the UK, where (largely imported) coal energy has steadily been declining over the past half century, all of the major political parties (the Conservatives, Labour and Liberal Democrats) agreed the country should aim to become a leader of the low carbon energy transition. In contrast, while all of the major Australian parties (Australian Labor Party, Liberal Party of Australia and National Party of Australia) agree that more renewables should be deployed, disagreement over the share of renewables of total energy, whether or not fossil fuels should be phased out and the target date for net zero emissions have been far more polarised across the major parties in comparison to the UK.

We investigate the influence of political ideology over public attitudes towards a range of energy technologies (namely: biomass, coal, shale (or coal seam) gas, natural gas, carbon capture and storage, hydroelectricity, nuclear, solar thermal and photovoltaic, wave and wind energy) by employing multivariate regression models to analyse the results of two similar public surveys that were conducted in Australia and the UK in 2017. Our analyses indicate that, broadly, those who vote for parties on the political right are more likely to be more supportive of the deployment of fossil fuels, while those who vote for the political left tend to be more supportive of renewable energies, suggesting that conservative ideologies are an important source of public opposition towards energy transition. We also find that right-leaning individuals tend to be more supportive of CCS and nuclear energy, suggesting that the environmental risks associated with these options outweigh their potential contributions to mitigation for left-leaning individuals. Our results also provide evidence that supporters of environmentally-oriented political parties, such as the Greens, tend to hold similar attitudes to those of a leftist disposition and express higher support for renewables relative to fossil fuels, CCS and nuclear energy, while adherents of economic-focused parties express more support for fossil fuels, CCS and nuclear energy relative to renewables.

These findings have important implications for the social feasibility of key energy policies relating to decarbonisation and energy transition, particularly in democratic countries where policymakers are often reluctant to adopt energy policies if they expect their electorates will be unsupportive, as well as for nascent technologies such as CCS, which are often obstructed due to strong public opposition undermining their 'social license' to operate.. Our finding that opposition towards energy transition tends to be concentrated among conservative segments of the public, who are generally reluctant to support policies that are justified on environmental grounds, suggests that frames which resonate with right-leaning individuals could prove particularly effective in overcoming opposition to energy transition policies.

Contact z.clulow@jbs.cam.ac.uk
Publication March 2021
Financial Support EPSRC, NERC, UQ-Surat Deep Aquifer Appraisal Project