The further economic consequences of Brexit: energy

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In this paper we examine the further economic consequences of Brexit for the energy sector in the UK in the light of developments since our previous paper on the topic in early 2017 (Pollitt, 2017). We now know a lot more than we did then about how Brexit will play out in the energy sector in the immediate post-Brexit period. Although Brexit – the UK withdrawing from its membership of the European Union - formally took place on 31 January 2020, EU-UK trading arrangements remained unchanged until 31 December 2020.

On 31 December 2020, the UK left the European single market in energy, having been a leading light in its promotion. It entered into a new energy relationship with the EU-27 as outlined in the EU-UK Trade and Cooperation Agreement (TCA) on 1 January 2021. We outline what the TCA says about energy. We then discuss the current and potential future effects of Brexit on the UK electricity and gas systems in turn.

We offer a number of observations.

First, the micro-economic impact of Brexit on energy remains modest at the price and policy target level. There has been a minimal increase in trade barriers in the electricity sector and no change to trading arrangements for the gas sector. There is a commitment to reduce, but not eliminate, the trade barriers that have been introduced. At the policy target level, both the UK and EU have committed to even tougher targets on climate change and renewables roll-out. In terms of energy R+D, the UK continues to participate in the wider Horizon Europe R+D programme and Euratom's Research and Training Programme.

Second, the macro-economic consequences of Brexit are playing out in the energy sector, as they are across the whole UK economy. Thus the output effect on individual energy intensive sectors, aggregate GDP, the political integrity of the UK and on a more muscular industrial policy do have bigger implications for the energy sector. Energy and climate change are a key part of a Green Industrial Strategy, which in turn is a key policy response to Brexit (and, now, COVID-19).

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Third, Brexit has increased fundamental uncertainty with respect to energy policy because of the exposure of all policies returning from the EU to more scrutiny and because of the impact of Brexit on EU energy and climate policy. The loss of UK influence on EU energy and climate policy increases the likelihood of future policy divergence, in spite of the fact that energy policies were initially fully aligned as of 31 December 2020 and remain closely aligned until 2028 via the TCA.

Fourth, so far the impact of Brexit has been largely benign in the energy sector. Somewhat surprisingly energy was prioritised within the EU-UK Trade and Cooperation Agreement and the 'loss' for the UK was minimal. Since the 2016 referendum the UK and EU have committed to Net Zero, which would seem to strengthen the incentives for continuing and growing integration of both electricity and gas systems. The UK's role as an exemplar to the EU may, if anything, have been strengthened, because there may be a genuine positive political competition emerging in a sector on which the hopes for decarbonisation and industrial strategy depend.

Fifth, the emergence of sensible long term arrangements between the UK and EU could benefit from increased transparency on what is actually happening with energy market arrangements. In a sector that has benefitted from increased transparency, market integration and shared climate goals it seems a great shame when shared efficiencies are being actively prevented. There should be full transparency around the Specialised Committee on Energy (set up under the TCA to oversee the new arrangements), membership of ENTSO-E and ENTSO-G (European transmission organisations for electricity and gas), the sharing of capacity in capacity markets and the market coupling arrangements in electricity. Electricity could learn from gas in finding a private solution to the achievement of market coupling, which achieves genuine free trade in electricity.

Sixth, it is worth saying that the TCA focuses on electricity and natural gas, but it is (largely) silent about new sources of energy such as hydrogen. These new sources might give rise to entirely new energy networks with market and regulatory arrangements which are outside the scope of today's arrangements in both the EU and the UK. The UK might find that any ambition to become a hub for hydrogen trade and production could be thwarted by its position as a non-EU member.

This last point begs a general question about Brexit and energy that remains to be answered, which is over what time period might we expect to see an effect? While the initial impact was designed to be modest in energy significant divergences might yet emerge. For instance, there is an increased risk of a substantial weakening of climate policy at some point, with consequences for the energy sector. However, there is also the possibility of a significant strengthening of climate policy powered by a more interventionist UK industrial strategy towards energy under governments of both the left and right as a result of Brexit. As time progresses it will likely be more difficult to say if Brexit was a significant driver of a given future energy policy shift.

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