

BREXIT and its implications for the British energy market

Dieter Helm

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Of all the contributions Britain has made over the four decades of membership, the creation of the Internal Energy Market (IEM) stands out. The EU built its IEM on the principles of liberalisation and competition that Britain had pioneered in the 1980s. Britain also was in the vanguard of the development of EU climate change policy, Margaret Thatcher having been one of the first to recognise the scale of the problem. The EU policies in these areas are largely what the British argued for, and what they got.

It is ironic that, irrespective of BREXIT, Britain now leads the retreat from the IEM. In energy, it has gone back to state determination of investment and greater regulation. In climate change it has long adopted a unilateral approach – the 2008 Climate Change Act, the decisions on coal, and the Carbon Floor Price are but some of the examples.

To understand the impacts of BREXIT on energy, there are two standpoints to begin with. The first is to understand what Britain is leaving. The second is the direction of British energy policy is heading, which is rapidly evolving too. Only then can we see whether BREXIT will make much difference.

What is the EU status quo?

Europe energy policy is made up of two pillars – the IEM and the Climate Change Package (CCP). These were developed quite separately. The IEM was part of the general drive towards the Single Market, which had initially excluded energy. At the end of the 1980s, the Commission sought to expand the Single Market into energy, with enthusiastic support from Britain.

The basic building blocks in the IEM were gradually built up in the face of lots of resistance from the big vertically integrated European energy utilities (the British ones having been broken up). There were a series of packages of directives. The end destination was always pretty clear. There would be unbundling of networks from generation and supply. There would be regulated third party access to networks, not negotiated access. Supply would be liberalised. It took 25 years to get it all implemented.

This liberalised and competitive market model was not and was never likely to be consistent with the EU's climate change ambitions. Europe wanted to lead the world on climate change, and hence it was the key promoter of the Kyoto approach. Indeed Kyoto ended up with only the Europeans on board, as other big players either did not join (US) or left (Canada and Japan). China and India never had targets under Kyoto, being in the separate "developing countries" annex.

In order to lead on climate change the EU adopted its own unilateral carbon targets, and underpinned these with its own renewables and energy efficiency directives. This was the 20-20-2020 set of targets. It built the EUETS on top of these.

Renewables were never going to be able to compete with conventional generation without a full carbon price. The EUETS never produced this, and arguably it probably never will. The renewables had to be ring fenced, outside the IEM, protected from competition and paid for through compulsory levies, and outside the EUETS.

The results were predictable. It was obvious that making all the numbers equal 20 would be chronically inefficient. But what really messed things up was the separation of the IEM from the CCP, without thinking through the interaction between the two. By pursuing renewables independently, the CCP produced two consequences.

First, the renewables reduced carbon emissions, and hence made it easier to reach the 2020 20% target, and in the process lowered the EUETS price. A lower EUETS price meant more coal could be burnt under the overall target, and this is exactly what happened, especially in Germany. Some 13GWs of new coal was added to its electricity system from 2000 onwards, and so brown rather than green was Germany as a result that it is in danger of not even meeting its own 2020 target. In the middle years of this decade Britain got back to 40% of its electricity generated from coal too.

Second, the protected renewables with their special contracts cannibalised the wholesale market and undermined the economics of other capacity (and in the process wrote off over half the market value of some of the vertically integrated utilities). Zero marginal cost generation rendered the investment model of the IEM, reliant on the wholesale market, ineffective. This laid the seeds to the development of the capacity markets, and the gradual undermining of a core building block of the IEM. Having taken 25 years to implement the IEM, it is now being overtaken by the CCP, and will be further undermined by a combination of the 2030 CCP targets and more and more zero marginal cost electricity generation.

What's next in the EU?

There is little doubt that the Commission would like to push on with harmonising its energy and climate policies, to create a genuine Europe wide energy market, with common rules and common renewables targets. But there is another narrative that is proving much more powerful – the reassertion of national policies by the member states. Most members are re-nationalising their energy policies. This can be seen in the development of *national* capacity markets and mechanisms, *national* energy mixes to meet *national* energy security objectives, and *national* renewables policies.

Climate policy is being re-nationalised too. The Commission failed to get agreement on imposing top down renewables targets for 2030, so it is left with

an EU target, but without corresponding national ones, which remain the ambit of the members. There are now multiple *national* carbon prices, with several countries pursuing their own *national* carbon taxes and *national* carbon floor prices. Energy efficiency policies are very much *national*, and then there are lots of unilateral *national* carbon targets too.

Belatedly the Commission is playing catch up, with a raft of new directives being pushed through at the end of this Commission and before the European elections in May 2019. These include market design and governance, alongside the 2030 CCP. What the Commission has finally woken up to is the consequences of the separation of the CCP from the IEM mentioned above, and is now trying to impose some common rules onto the emerging national capacity markets. It is all a bit late, as the horse has well and truly bolted already.

For all the focus on the IEM, it is defaulting into part of the more general competition and state aids European frameworks, and the common procurement rules. It is too little and too late to save the spirit of the IEM, and in any event the coming of more and more zero marginal cost renewables, as well as rapid technical progress on storage and active demand management, will carry on reducing the role and importance of the wholesale markets. As explained in my book *Burn Out – the endgame for fossil fuels*, digitalisation is bringing about a fundamental transformation that is sweeping away the foundations of the IEM. Having taken 25 years to implement, it has arrived just when its very rationale is being undermined.

When it comes to the EU external policies that Britain is leaving, the EU has again battled with national interests and especially those of Germany. Just as the *energiewende* and the closure of nuclear was a unilateral German decision, so too has been the pursuit of Nord Stream1 and now 2. The old Russian-German energy links have a very long tradition, as the Poles and others point out.

The Commission would like to extend the Gas Directive to these sorts of external pipelines, and to protect Ukraine from the explicit Russian intention to terminate

most of the gas flows through Ukraine in late 2019, when the current contracts come to an end, replacing the Ukrainian flows with Nord Stream 2. There has been a lot of resistance to this move by the Commission, with German companies in the vanguard. (Merkel has belatedly shown some resistance, demanding safeguards for the Ukrainians).

What is UK energy policy now?

This is what Britain will be leaving behind, a process of gradual reassertion of the national over the European control of energy policy. It is a general approach across Europe on energy policy that is going to take place anyway, regardless of BREXIT.

Britain has already done a lot of its energy BREXIT, in advance of it actually happening. Having pioneered the liberalised and competitive market model, the state has returned as the principal actor in the electricity market, with Energy Market Reform (ERM) earlier in this decade, and then the capacity market, which is centrally determined and centrally auctioned. State-backed contracts compulsorily pass through the costs to consumers. For the generators, the state is now their customer now, not the consumer. Britain has state-determined contracts for renewables, through the FiTs and the CfDs. The state sets the contracts for nuclear, and the state has set the Carbon Floor Price and a target for closing down coal. There is a unilateral climate policy set in the 2008 Climate Change Act and implemented through carbon budgets.

It remains true that Britain is subject to EU state aids clearances, but these have proved largely administrative hassles. The Commission has not managed to have much sway over the Hinkley nuclear contract, and it finds it very hard to touch the arrangements for renewables contracts. On the capacity market, again the Commission has not had much sway. As long as the contracts are auctioned, the competition constraints do not really bind.

Does BREXIT make any difference?

Fast-forward to post 2020 and the end of the British transition, having left formally at the end of March 2019. Will anyone in the energy sector notice? The answer is largely no. The rules of the IEM are probably going to remain *de facto* if not *de jure*, since most of them are already embedded in the British regulatory structures, which have evolved alongside the development of the IEM. On climate change, the main impact will be that the new 2030 renewables directive will not formally bind, but since this does not have any national targets associated with it, it is unclear what effect it would have had anyway on British policies.

There are a few areas of the IEM where there might be some important BREXIT implications. These include market coupling and interconnectors. Market coupling is part of harmonisation, and it has a very special dimension in Ireland. The All-Ireland Market is a major achievement following on from the Good Friday Agreement and the coming of relative peace. The IRA no longer threatens to shoot anyone working on the interconnections between north and south. As the markets between the north and the south have been coupled, there will probably need to be further special arrangements (and a role for the ECJ perhaps).

On interconnectors, there are a host of issues where the British and European rules will come into repeated contact, but it is not particularly hard to work out how to operate these. The world is bisected by thousands of gas and electricity interconnections, and the principles of trade are pretty straightforward. Since Britain is going to be the buyer in both gas and electricity from Europe on an increasing scale, the answer is that Britain will have to follow EU rules. In the next decade the interconnectors are scheduled to be the second largest source of electricity generation, and with the closure of Rough, the dependency will be all the greater for gas. (The closure of the Netherlands main gas field complicates the gas supply flows further).

On climate change, the big question for BREXIT is what happens to the EUETS and Britain's participation in it. The EUETS is governed by the Commission and the ECJ. The British government has made clear that the role of the ECJ is a red

line: it does not want to be “ruled by a European court”. After BREXIT Britain will have no formal say in the evolving rules of the EUETS, in revisions to targets and in any further steps to bring in a Europe-wide approach to carbon floor prices. Taken literally, Britain will have to leave the EUETS to escape the clutches of the ECJ. In practice Britain might just swallow its red line, as it is doing in so many other areas. Companies and traders who profit from the EUETS, and benefit from its low prices, will lobby hard to stay inside, and protect the assets that permits can represent on their balance sheets.

In any event the EUETS is not a big deal. It produces a price that is so low and volatile as to have little bite on emissions. These are determined by other policies - such as on renewables and the Carbon Floor Price. Though there is much excitement about the impacts on carbon prices of the recent EUETS reforms, it probably never will live up to its original billing. Leaving the EUETS would not be a great burden to Britain: indeed it could get on with its own carbon price to meet its CCA targets and carbon budgets and, even better, develop its own carbon border tax adjustment.

There is one final twist to BREXIT: Britain relies on Euratom to regulate its nuclear industry and to provide a framework for the handling of fuels and wastes. It is pretty obvious to everyone closely involved in nuclear matters that Britain should stay in the Euratom framework. However along comes that red line again – “taking back control” from the ECJ. As with the market coupling in Ireland, the European solution is the best way to go, and for political reasons, that is being rejected. In both cases (and the EUETS) the most likely outcome is a fudge and a weakening of the red line. Sometimes the gains from a common framework are just much greater than the illusion of taking back control, and it is pragmatic to bow to the inevitable role of the ECJ.

What will happen to British energy policy after BREXIT?

Britain’s energy policy is already on a pretty clear path, regardless of the EU and the IEM and the CCP. In the *Cost of Energy Review*, two further major steps are set

out. These are the Equivalent Firm Power auction, which integrates and normalises the renewables into the capacity market, and represents another step from wholesale markets to capacity; and the creation of regional system operators separate from the distribution network companies (the DNOs) and the full separation of the national system operator from National Grid.

Contrary to much lobbying from vested interests, both these reforms are already well on their way, and will become inevitable into the next decade. Neither would be likely to be opposed by the Commission: indeed the Commission has shown great interest in both of them, as possible blueprints for the future evolution of energy markets and the associated policy frameworks.

This brings us full square back to the irony of BREXIT. Britain led the way as the model for the IEM, and championed the development of European climate change policy. Now it is leading the way in developing integrated capacity markets and normalising renewables into the mainstream of energy markets. It is leaving behind the EU just when the EU is once again following the national model Britain has been developing. This not surprising: the problems of decarbonisation and the opportunities provided by digitalisation are common. Were Britain to stay in the EU, nothing would be very different, and quite a lot of tricky problems, like Ireland, nuclear and the EUETS would not arise. The energy costs of BREXIT are small, but they are largely negative, given the overwhelming shift to a national approach across Europe that is happening regardless of BREXIT. Britain and Europe are heading in the same direction on energy – a national one.

Dieter Helm is the author of *Burn Out: the endgame for fossil fuels*
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www.dieterhelm.co.uk

