

ENERGY AND CLIMATE POLICY AFTER BREXIT

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Dieter Helm

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If BREXIT means BREXIT, and Britain does actually leave the EU, what will be the impact on British energy? What will happen to the Internal Energy Market (IEM)? Will Britain still participate or even have access? What will happen to the existing EU directives – on the 2020 targets, state aids, and the Internal Market Package? Will Britain have any role in the suite of new directives slated for next year – on 2030 targets, renewables, energy efficiency, market design and governance? Where will Britain stand in regard to the European Energy Union?

Presumably those so keen to “take back control” will want to recast all these EU rules and policies in the new British-only interest. There is, as I argued in my early paper on “24th June” (24th June - the day after the referendum on EU membership, 11th May 2016) no point for them in BREXIT if the EU laws and policies are not recast in a British-only image. The “Great Repeal Act” is intended to incorporate the existing EU regulations into British law, and then take the so-called Henry VIII powers to strike out whatever the government dislikes without recourse to Parliament. There are many in the Conservative Party who would like to take an axe to quite a few of these.

The uncertainties created by BREXIT, the mad 24 months from the starting gun in March 2017 on Article 50 through to the “deal” with the EU on exit, the subsequent exercise of the Henry VIII powers, the complexities of the sector-by-sector trade negotiations with the EU, and full WTO membership process, unsurprisingly leave the future as clear as mud, and the mud is likely to persist for months or even years. Yet there are options, and these range from remaining in the single market and hence the IEM, through to a hard BREXIT relying eventually on the WTO. In between, is the possible option to rely on the Energy Union, outside the formal membership of the EU and its institutions.

Not a great history

First, we need some realism about the starting position. European energy and climate policy is not blessed with a history of either well thought out interventions or particularly impressive results. It has been a marriage of two different and often-conflicting objectives: to promote and enhance competitive energy markets, which are technologically neutral; and to promote the climate agenda in a deliberately technologically biased way, outside and separate from the competitive markets. In the last decade, a third element has been grafted on – to try to bolster European energy security, in the face of repeated threats – and some politically inspired interruptions – from Russia.

The IEM is very much a British inspired creation. It has yet to be fully implemented after 25 years of trying and there is still quite a lot of price dispersion, which does not reflect cost differences. Yet the Commission has made some progress. The irony is that this progress has finally been achieved, just as Europe moves away from reliance on wholesale markets towards capacity, and a fixed price contracts world, and just as Britain has opted for the single buyer model it spent so much effort and political capital fending it off when France advocated it. It has been a spectacular British U-turn.

Whatever the failures in implementation, the IEM rules are now well understood. Their key elements are liberalisation (the right to choose suppliers), third party network access (the right to access markets, supplies and customers) and unbundling (reducing the scope for the abuse of vertical integration).

The quite separately developed Climate Change Package is complex, inefficient and weakly implemented. It comprises: an overarching carbon target (20% by 2020); a renewables energy target (20% by 2020) and an energy efficiency aspiration (variously set at 20% by 2020). The clue to its poor design is that it is all supposed to add up to the magic number “20”.

Yet this is only the start of the inefficiencies. The overall target is being primarily achieved not through policy measures, but rather through poor economic growth (and indeed a series of crises), and deindustrialisation. Both reduce demand, and hence carbon production (but not necessarily carbon consumption embedded in carbon intensive imports now increasingly from countries like China).

The EU Emissions Trading Scheme (EUETS), the central policy instrument, is expensive to run, prone to corruption and has yielded a price of carbon so low as to be no noticeable impact on emissions and investments. Worse still, since the renewables target is independent of the emissions target, but the emissions target is embedded in the EUETS, as renewables come onto the system, they create more room for emissions within the EUETS, and hence allow more coal to be burned. For the period since the 20-20-2020 targets were agreed, Europe has witnessed a dash for coal, with Germany the stand-out example, having added 13 GWs of new coal capacity, some of it lignite based, since the middle of the last decade, taking coal up to 45% of its electricity generation. It now has to confront the enormity of this carbon policy failure, having also fast tracked the closure of its existing base-load nuclear power stations.

On the security side, the EU has tried to respond to the threat posed by Russia and Gazprom to Europe's energy supplies by: failing to commit and build the Nabucco pipeline; allowing Germany to build the Nord Stream pipeline direct to Russia, bypassing the EU members most threatened by Russia in the Baltics and Poland; and ducking the questions of common contract terms, and failing to fully investigate Gazprom's alleged discrimination and other violations of competition policy. Its one success has been to oppose the South Stream pipeline proposal. On strategic storage and system resilience, it has been weak too.

What is coming next?

With this record, the gaps between the opportunities and ambitions, the efficient policies and the reality are large. In Britain's case, it is hard to see much benefit from the EU's energy and climate policies, as it has been ahead of the EU on

liberalisation and competition until recently, and it has its own much more demanding *unilateral* climate policies. Add in the burden of the Renewables Directive, and *from a very narrow national self-interest perspective*, Britain would probably have been better off outside.

If anything this gap is about to get bigger. The reasons are partly due to the unanticipated consequences of existing policies, and partly because the convenient fiction that the three objectives (of competition, carbon reductions and security) are easy and convenient bedfellows turns out to be just that – a fiction. It is sadly not “win-win-win” as the Commission spin-doctors would have it.

The IEM takes the wholesale market as the core vehicle through which competition takes place and where costs and therefore prices are established. But the climate change agenda promotes technologies *outside* the wholesale market, and which are in large measure zero marginal cost. Thus over the quarter of a century the IEM has been gradually and painfully implemented, the economic nature of the energy market has been shifting from wholesale towards a fixed priced, zero marginal cost world, and the price of electricity has consequentially been increasingly driven by the Feed-in-Tariffs (FiTs) and now capacity payments. Thus, contrary to the Commission and most member states governments’ expectations, the wholesale price has been falling, not rising.

On the renewables front, the Commission assumed that the oil and gas prices would go on rising for the foreseeable future, and therefore the costs of the renewables would cease to be a relative burden by around 2020. By then oil and gas prices (and coal) would be so high that even the offshore wind would be cost competitive, and Europe would have a relative competitive advantage over the US, with its reliance on fossil fuels. This is the fantasyland of peak oil.

Security comes at a price, and one that the Commission has not been able to persuade the member states to pay for. It is also best met in the short run in a number of countries by burning more coal, as the Poles have repeatedly pointed

out. Relying on current generation renewables does not enhance security against Russia threats and interruptions, contrary to the mantra that renewables increase security. Security, if taken seriously, requires more than wind turbines and solar panels, at least for the next decade or so. The conflict with the decarbonisation objectives is stark.

The final development, which the Commission did not anticipate, is that energy policy in Europe has not become more European as the years have gone by. On the contrary, Germany has in particular pursued an overtly national policy. The *energiewende* is a German policy, pursued for German reasons, with little or no consideration, or indeed consultation with its neighbours. The *energiewende* is an industrial policy to build competitive advantage for Germany (in the mistaken belief that renewables would be cheaper than fossil fuels, because the Germans “knew” that fossil fuel prices would keep going up). The Germans unilaterally closed a number of nuclear power stations following Fukushima, and decided to close the rest by the early 2020s. It increased its coal burn as a result, halting its decline in emissions (they actually went up in 2014). The Germans built the Nord Stream pipeline for German security, bypassing Poland and the Baltics.

They were not alone in this unilateralism. Britain adopted *unilateral* carbon targets, and a *unilateral* policy instrument, the carbon floor price. Britain announced the phase out of coal, and introduced its own capacity market. Britain became the first clear example of a full single buyer, with the government now responsible for contracts supporting all new generation investments. From being the cheerleader for liberalised and competitive pan-European energy markets, as noted it performed a spectacular U-turn, and now is, like Germany, pursuing a British first policy. It is very much in accord with the presentation of narrow British interests over those of Europe as a whole that BREXIT reflects.

All of this national focus is arguably consistent with the Lisbon Treaty, which reserves the energy mix choices as a national, not European competence. (Tax is also national not European).

The new directives

Faced with the reality of these trade offs and the development of zero marginal cost generation, and the continuing stand off with Putin not only over Crimea, but also at the Baltics borders, the Commission has been trying to take the lead in proposing a whole new raft of directives and interventions. The Paris Agreement on climate change has added to the list of proposals for new legislation. These may gain further momentum if they are showcased in the White Paper on the future of the EU in March 2017, to coincide with the 60th anniversary of the founding of the EEC.

The first new initiative is the boldest and so far has proved elusive. This is the idea of a new EU “Energy Union”. It was proposed by Donald Tusk, as Poland’s prime minister, and subsequently promoted by him as President of the Council of Ministers. The idea was to confront the Russians with a unified single purchaser of gas, to bring an end to the divide-and-rule tactics Gazprom, used to try to deter back-up and re-supply to Ukraine and to offer countries better gas deals in return for political favours, and to thereby further isolate Ukraine.

The idea is not without merits, and we return to it below. Yet it has been “parked”, and instead the Commission has come up with a raft of new directives focussed on the new climate change package for 2030, and on the competition rules. The Energy Union has become a convenient heading for the commission to embed the policies already in the pipeline. One the 2030 package, the Commission aims to bring forward directives on: the national allocations of the 2030 targets; a new renewables target; and an energy efficiency target. On competition, it proposes to legislate on market design to capture the development of capacity markets, and to augment its state aid rules. Finally, it proposes a “governance” directive on the rules for the Energy Union.

This is an ambitious agenda, and it makes a lot of sense when considering the opportunities for enhanced efficiency, market convergences and the meeting of the 2030 targets. Yet it is also one that BREXIT comes up against. BREXIT and

Britain's future relationship to Europe's IEM and the 2030 climate package is therefore as much about whether Britain wants to be bound by these new directives, as it is about whether and to what extent it wants to continue to work with existing ones.

BREXIT and the existing IEM rules

To an important extent, the IEM was based on the British model that emerged after privatisation. The break up of the CEGB and eventually British Gas, the creation of National Grid and the independent role of what were then the Regional Electricity Companies became a template for Europe, together with the RPI-X price cap regulation of monopoly and the gradual liberalisation of supply. Britain went for regulated third party access, a competitive wholesale market and liberalisation of supply ahead of the rest of Europe. Much of this was in British law before it was in the EU law, and even if Britain left the EU's overall single market (as well as the IEM) it is unlikely that much of this legal and regulatory framework would be changed. It would certainly not be first in the queue for axing under the Henry VIII powers in the Great Repeal Act.

The interesting bit is the prospective new market design directive and associated rules and governance. The Commission has not been enthusiastic about Britain's new capacity market, though it has not sought to oppose these developments. On state aids, and despite reservations in private if not in public, the Commission has not stood in the way of the British FiTs, and in particular despite a highly critical initial report, did not oppose the nuclear project at Hinkley. The reasons are many and various, but behind all these examples lies the fact that the Lisbon Treaty reserves decisions about the energy mix to national governments.

To the extent that the British government wants "more market" and to get away from its role as a single buyer discrimination between the various technologies, a market design directive which promoted technical neutrality might go with the grain of British intentions (though perhaps not the reality of what subsequently emerges in British markets).

State aids is a tougher call, since there is inherent uncertainty in how it might be applied. Hinkley survived the test, but there can be no certainty that other subsequent projects might pass the test. There is also the vexed question of the allocation of the larger and larger element of fixed system costs in the total price. Measures to favour export industries, and different customer groups, are likely to emerge, and because the costs are fixed, there is no switching or competition to avoid them – unless people and communities decide to defect from the system. Then there are the rules governing interconnectors and exemptions from the third party access rules and other special arrangements. These are all potential “arguments” to come.

The risk for BREXIT is that if Britain stays with the IEM, these necessarily controversial decisions about the shape and scope of new directives and the evolution of the state aids rules will be taken without British input. ACER, the European energy regulator, might lose its British component in decision-making. There will no longer be British officials in the Commission. This matters because one of the informal but important checks on the Commission has been the fact that many officials see their role (and futures) through the partial lenses of their own countries.

Climate change and the 2030 package

On climate change, the case for a comprehensive BREXIT is strong, regardless of the views taken on the seriousness and priority of the problem. The overall target set at Paris is in practice non-binding on Britain because the British Climate Change Act and the associated carbon targets and carbon budgets are binding constraints. The fifth carbon budget sets a target well above the Paris (and EU) 40%. Britain does not need the EU to pursue carbon targets, and it does not now rely on them. (It is a separate question as to whether unilateral national targets and unilateral national policies are a good idea in confronting a global problem, and where carbon consumption is much more important than the carbon production basis in the targets).

Where EU membership has been especially costly and inefficient is in respect of the renewables directive, which has forced large sums to be spent on existing renewables and to the exclusion of other options. Britain's energy landscape would probably have been very different without the 2020 renewables directive. The proposed 2030 renewables directive is as dogs-dinner: it requires the EU as a whole to achieve the new 2030 27% target, without requiring individual members to have any target.

No one has explained how this could work, except if the new governance directive – or some other measure – forces countries to have “renewables plans” which would be “compatible” with the 27% target, and crucially if the Commission had the right to vet and approve these national plans. It is hard to see how any of this could be in Britain's narrow self-interest (or even most European countries' interests, except perhaps Germany).

The governance directive is one that is likely to upset British BREXIT supporters most. It is so far a vague and general attempt to give the Commission greater powers of oversight across the energy sectors. This might be linked to lending by the European Investment Bank.

The central plank for the future of climate policy in Europe is the EUETS. This is an incredibly inefficient policy instrument, as noted above. The Commission is trying to “doctor” it to produce higher prices. The outcome, through back loading and manipulating the number of permits, is to design a system, which in effect tries to mimic a carbon tax in the most costly way imaginable. What matters is the carbon price, and the best way is to set it directly – a carbon tax. That is why Britain has a carbon floor price, and others, including France are thinking along the same lines.

It is true that BREXIT from the EUETS would create problems for those who get away with higher emission than they would have done with a proper carbon

price. There will be losers. But from a carbon perspective, why would this be a bad thing?

The timing is crucial: BREXIT before 2020 is highly disruptive as this is the third period of the EUETS. It would therefore be better to keep going until 2020 – only a year after the Article 50 process results in formal exit.

There is one final benefit from an EUETS BREXIT. It might help the EU to design a proper carbon policy, and to target a carbon price. It might get back to where the Commission wanted to be in 1991, when it advocated a carbon tax. Post BREXIT, Britain could set its carbon price taking into account the level set in the EU.

The timing of the new directives

As with many things European, the new directives have been very much on hold until after the BREXIT vote. But they face other obstacles too. In 2017, there will be important elections in the Netherlands, France and then next autumn in Germany. In all three cases there is a strong right wing Eurosceptic challenge. None of the incumbent leaders will want to give ammunition to these anti-European parties. Contrary to much political comment in Britain, there is no reason for Europe to be nice to Britain, and it is imperative if the EU is to stay together that Britain is seen to lose from BREXIT. Otherwise others would obviously be tempted to follow. In energy, why would any of the major players want to take account of British interests in shaping the new directives and the 2030 climate package?

Further political difficulties are added by the tensions between the “German energy model” and what was once regarded as the “British model” (now no longer British, given its U-turn to the single buyer model). Germany wants every member to have national renewables targets, to face the same costs as Germany, and preferably to have to buy German energy equipment to meet these targets. France cannot make up its mind about nuclear. President Hollande wants to reduce nuclear from 80% to 50% of the domestic market, but nevertheless to

promote Hinkley and further French design PWR nuclear reactors abroad. A German-French energy bargain is very much easier to strike without Britain. It may well be that the aim of pushing these various directives through over the next year becomes a casualty of the political timetables yet again, and that they get pushed back to the end of 2018 – or even later. The further out, the less and less relevant Britain becomes, unless it strikes an interim deal – but again why would Europeans want to offer one? How could this do anything other than play to their own Euro sceptical and radical populist parties?

Is there a way to do BREXIT and keep a European energy dimension in place?

The choice on energy is at one level fairly straightforward. Britain can stay in the Internal Energy Market, but would then probably have to be in the broader Single Market generally and abide by its rules and accept some free movement of people. This is roughly the Norwegian option. Britain could leave the Internal Energy Market, but agree to abide by its rules. Britain could just leave altogether, and then negotiate on energy trade, interconnectors and energy and carbon taxes and permits. This could be one of the proposed sector-by-sector agreements, bilateral agreements on specific interconnectors, or it could be as a result of eventually getting direct membership of the WTO and applying the Energy Charter rules.

None of these looks particularly clear, except perhaps the last one – complete independence. Yet this hard BREXIT comes with costs. There is possibly another way, though it may take some time to achieve. This revolves around the Energy Union. It is conceivable that the Energy Union could develop a life separate from, but related to, the EU, following the examples of other inter-governmental institutions in Europe. Not everything agreed between European countries needs to be via the EU and its formal membership structures. There are lots of examples, including atomic power, defence and security arrangements, and of course human rights.

Is this just a far-fetched academic idea, or could it work? The fact is that some of the broader European, as opposed to EU structures, already exist. The European Energy Community includes a number of non-EU members. The Energy Charter is a more international body. The Paris Agreement is a global climate one, not an EU deal.

The Energy Union was not proposed as an inwardly looking concept by Tusk. The Commission took it over to incorporate its existing preferred route. Tusk set out his idea in the context of Russia and Ukraine and the external threat to energy security. This agenda lends itself to defence and security concerns, and less to the finer details of the IEM, and it had nothing directly to do with climate change.

An European Energy Union could coexist alongside the EU and its IEM and climate policies. It could take a number of structures. At one end of the spectrum, it could be an inter-governmental framework, structured around regular formal summits. It could be as minimal as the G7 or G20, or it could be an enhanced IEA type structure, with the powers to act in the event of emergencies. It could promote infrastructure and mutual support arrangements. It could have its own mutual support treaty, mirroring the NATO Article 5.

This is of course a far cry from the pure IEM model. But as argued above, the IEM has probably now run its course, and its rules will be transposed into British Law through the Great Repeal Act.

That leaves climate change. Yet as with the IEM, the EU has here too exhausted its current approaches. There is no advantage in joining a EU-wide renewables target, which in any event contradicts the Lisbon Treaty reservation of the energy mix to member states. Indeed, it is possible to go further. There is no good economic or environmental argument for having a specific target for a specific subset of low carbon technologies, which on the one hand excludes nuclear and on the other includes biomass.

The overarching Paris framework is a global one to address a global problem. It is far from ideal, yet Britain does not need to be a member of the EU, or the IEM or the 2030 package to pursue a climate change policy. Indeed, it is already ahead of the EU in its own unilateral targets and policies.

What about Europe's interests?

This paper has considered some of the issues around BREXIT and EU energy policy. Unlike a number of other areas, the practical impacts of BREXIT on both energy and climate change are small, and could even be positive. Energy was never part of the original EEC, and its original customs union. From a purely British national self-interest, BREXIT is no big deal. Indeed there are some upsides. Britain can escape the inefficiencies of the renewables directive, and get out of the very badly designed and costly EUETS.

For the rest of the EU, BREXIT is bad news for energy and climate policies. The whole point of a European energy and climate policy is that it is more efficient to do these on an EU-wide basis. The gains from a Europe-wide approach are potentially very big. A fully interconnected Europe, with integrated infrastructure networks for both electricity and gas, requires a lot less capacity to ensure security of supply. There is a big portfolio benefit. Then there are the advantages of matching intermittent and varied technologies through the grids. A proper European approach reduces costs, and increases security, and makes decarbonisation both cheaper and faster.

What is not to like about this? There are two problems: European countries have increasingly fallen back to narrow national self interest; and the Commission has not been good at doing the practical job of coming up with efficient policies, but rather fallen victim to the lobbying and rent seeking of particular vested interests. *In theory* a European approach is a no-brainer; *in practice* it has been anything but. The gap between what could be achieved and what is being achieved is enormous, and the Commission has not worked out how to share the benefits of cooperation so that members all can see tangible benefits.

As nationalism has narrowed the interests, the Commission has three options: it can redouble its efforts to make its existing policies work; it can reform its approach; or it can put its back into making a separate Energy Union really work. The first has run its course: the renewable directive, the EUETS and the failure to understand the switch to capacity markets are largely, from an economic perspective, dead ends. The second would require abandoning its detailed technology-biased interventions, moving to a carbon tax and closing down the EUETS and coming up with a competitive capacity market framework. The third would require imagination and a recognition of the new realities, not least the revisionist approach to Europe's borders and security posed by Russia.