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Energy and climate policy is scarcely the major issue in the UK's impending referendum on European Union membership. But the British public needs to consider carefully all aspects of EU membership – merits and demerits – before coming to their decision in June 2016 on their country's international future. It is therefore important not to leave unanswered the bold claim of the principal business lobby for Brexit, 'Business for Britain' (B4B), that "leaving the EU would, as far as energy is concerned, give the UK the chance to opt out of a relationship where the disadvantages overwhelmingly outweigh the advantages".<sup>1</sup>

The issues are mainly over clean energy policies, the cost of renewables and efficiency programmes, the extent to which the EU has added not only ambition but also extra cost and inflexibility to these policies, and to a much lesser extent EU regulation of offshore oil and gas. The debate is dominated by the very important, but inevitably hypothetical, question of whether, in the event of a vote for Brexit, the UK would seek to minimise Brexit's impact by maintaining maximum cooperation and policy alignment with EU energy and climate policy or use its institutional freedom from the EU to reverse key UK environment and climate laws and practices. In this regard, House of Commons researchers recently noted, "An EU exit would not remove the legally binding UK climate targets under the Climate Change Act 2008 although it could increase focus on all aspects of UK-based generation. This could especially be the case if exit resulted in poorer security of supply through decreased interconnectivity to Europe, reduced harmonisation of EU energy markets, or less investment into the UK by multinational companies".<sup>2</sup> If there were only a narrow majority for Brexit, the UK would probably follow the course of maximum cooperation with the EU, but if there were a wide majority for Brexit it might perhaps choose to follow an independent course.

**The line-up**. The protagonists are, on the Brexit side, an amalgam of opponents of wind turbines and solar farms on grounds of cost and unsightliness, of climate sceptics, some industrialists with energy-intensive plants and, less vocally, a few smaller oil and gas companies which fear possible further EU regulation eroding their declining profit margins in the North Sea. A prominent Brexit supporter who has made energy policy a key reason for quitting the EU is the former Conservative environment minister, Owen Patterson; he claims "our current energy policy is a slave to a flawed [EU] climate action". Those in favour of remaining in the EU, for reasons of energy and climate policy, are an amalgam of the environmental movement, the renewable energy sector, and the major gas and electricity utilities and oil companies. Most of the latter group are multinationals with shareholders and/or operations in the rest of the EU. Four of the UK's Big Six generators are European-owned, and the two UK-majority owned ones, Centrica and SSE, favour the UK staying in the EU – as do the dominant oil majors in the UK part of the North Sea – BP, Shell and Total.

**The paradox**. Brexit supporters would be fully entitled to make the argument in energy – as they emphatically do in other areas – that "the European Union of 2016 is not what we signed up to in 1973" when the UK joined the EU or in 1975 when the UK last had a referendum on the issue of membership. In the 1970s EU energy policy was little more than hand-wringing Commission communications about security of oil supplies, an issue primarily dealt with outside the EU by the International Energy Agency. But Brexit supporters do not in practice make this argument, perhaps because most people in the UK are broadly happy with the way EU energy policy has evolved over the years<sup>3</sup>.

This is not surprising. EU policy has actually followed the direction of UK policy, first with liberalisation of the EU energy market in order to foster cross-border integration and competition, more recently with intervention in the energy market in order to foster low-carbon generation. The Commission does not really like the interventionist measures of current UK policy, but has followed, and indeed facilitated, the

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<sup>&</sup>lt;sup>1</sup> Business for Britain, Change or Go, page 491, July 2015.

<sup>&</sup>lt;sup>2</sup> EU referendum:impact of an EU exit in key UK policy areas, House of Commons Library, February 2016

<sup>&</sup>lt;sup>3</sup> Europe's Long Energy Journey: Towards an Energy Union?, by David Buchan and Malcolm Keay, published by Oxford University Press for OIES, December 2015.



UK's policy U-turn by approving the huge subsidy on offer for new nuclear build at Hinkley Point and the UK's capacity market to incentivise conventional back-up generation with capacity payments.

**Convergent UK-EU goals**. The EU shift to a low carbon energy policy has not been a problem for the UK, because it accorded with a similar national shift that, if anything, began slightly earlier in the UK. The first mark of this UK shift was the Royal Commission on Environmental Pollution's recommendation in 2000 that the UK should, by 2050, cuts its emissions by 60 per cent below the level of 1990. The recommendation became incorporated into government policy. In 2003 the UK instituted its own cap and trade scheme in the run-up to the start of the EU Emissions Trading Scheme in 2005. The real milestone in UK policy was the passage, with only five MPs dissenting, of the 2008 Climate Change Act. This binds UK governments to cutting emissions by 80 per cent by mid-century and, along the road to that 2050 limit, requires the setting of 'carbon budgets' every five years. This goes well beyond anything required at EU level. So far-reaching emission reduction goals are something that the UK has imposed on itself.

**Divergent UK-EU policy means?** While the policy goals of UK and EU energy and climate policy are the same, the EU has placed some constraint on how emission reductions are achieved – but in practice the UK has largely been free to follow its own course:

- National renewable targets. Of all the EU-28 countries, the UK has the most stretching national target an increase from 1.5 per cent of energy consumption in 2005 to 15 per cent by 2020. From the start it was clear that this target was set too high, and so it is proving. Although the current UK government still claims publicly that it is on course to hit the 15 per cent mark, privately it has admitted that the likely UK renewable share of energy consumption by 2020 will only be around 11.5 per cent <sup>4</sup>. Of course it is also helping to make this a self-fulfilling prophecy by cutting back a variety of renewable subsidies. Much of the Brexit supporters' criticism of EU energy policy is focussed on the cost to the UK electricity consumer of renewable subsidies to achieve the 15 per cent target. But the UK accepted its national target in the first place, and now seems to be effectively ignoring it. Moreover, partly thanks to UK pressure, it has been decided that national renewable targets will disappear after 2020.
- The ETS. The UK was enthusiastic about this market-friendly mechanism to reduce emissions. It
  has therefore been disappointed that the Commission mismanaged the early phases of it by
  allowing an over-allocation of carbon allowances, thereby depressing the carbon price below a level
  at which it could influence energy supply and demand. But the weakness of the ETS has not
  constrained UK policies: the UK government introduced its own minimum carbon price on fuels for
  power generation (and subsequently, under pressure from energy-intensive companies, delayed
  any increase in the tax.)<sup>5</sup> In any event, EU policy-makers have now approved changes to the ETS,
  which are designed to raise the ETS price and which may go some way to meet the UK complaint.
- EU anti-pollution directives. The Large Combustion Plant Directive and the Industrial Emissions Directive have accelerated the closure of UK coal-powered generators. But the generators, admittedly for the most part foreign-owned, could have gone to the expense of upgrading their plants to meet the directives' requirement, and decided not to do so. Moreover, the final blow to UK coal power has now come from Whitehall, not Brussels, with the UK government decision to ban any coal powered generation from 2025 on.

In sum, these EU constraints on UK energy policy are minimal, and have either been further minimised by EU action (in the case of renewable targets and the ETS), or made moot by UK national measures (on coal). To use these EU constraints to argue that the UK would be better off outside the EU, one

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<sup>&</sup>lt;sup>4</sup> Leaked letter by Amber Rudd, secretary of state for energy and climate change, published by The Ecologist magazine, November 2015.

<sup>&</sup>lt;sup>5</sup> In 2013 the UK instituted a carbon floor price or tax that was to rise progressively. But the following year, it decided to freeze the floor price at 2015 levels for the rest of the decade.



would have to assume a wholesale rejection by Brexit Britain of long-standing clean energy and environmental goals and policies.

## What of the benefits of EU membership - to what extent would they be lost by leaving the EU?

- UK influence on the development of Europe's gas and electricity markets. This influence has been considerable not just in the push for liberalisation, but also for instance, the EU's gas target model has been based on the shape and structure of the UK gas market. The decline in UK production of oil and gas, with the UK ceasing since the turn of the century to be self-sufficient in these fossil fuels, has sharpened UK interest in the development of continental energy markets, and in particular on being able to import gas and power from the continent on competitive terms. By leaving the EU, the UK would drop out of the two EU-wide regulatory bodies dealing with markets the Council of European Energy Regulators (CEER) and the Agency for the Cooperation of Energy Regulators (ACER).
- Supporters of Brexit suggest quitting the EU would leave the UK free to join other international bodies dealing with energy. However, it is not clear that they have thought matters through one particular suggestion from Business for Britain is certainly highly questionable. B4B suggests that the UK could join the Energy Community, whose members are EU member states plus non-EU countries mainly from the western Balkans, along with Ukraine, Moldova and Georgia. "The Energy Community is open to third countries, and the UK would be able to become a 'party' not a mere 'participant' after leaving the EU. It would also not be required to agree its position with the European Commission before any Energy Community meeting"<sup>6</sup>. All this is correct, but it completely misses the point that the Energy Community is intended as an ante-chamber for countries wanting someday to join the EU, and in preparation for that day its purpose is the extension of EU energy legislation to would-be EU members. This is hardly company that Brexit Britain would want to keep.
- Energy security through integration into the European market. Breaking with the EU would not of course necessarily mean breaking the UK's existing gas and power interconnections with EU states (though it might well create uncertainty about the future development of these interconnections). No doubt one transmission system operator (TSO) could still speak to another and the National Grid would remain a member of the European Networks for the Transmission of Electricity and Gas - Entsoe and Entsog - which have some non-EU members. These organisations play an increasingly important part in planning new infrastructure, for which there is some EU funding under the Projects of Common Interest programme which can extend outside the EU. So Brexit Britain would have no reason to panic about energy security - but it would still have to consider the disadvantages of being outside the EU's collective security arrangements and its negotiating strength with outside suppliers. On the other hand it is not realistic to suggest that there is a potential "tantalising" energy security bonus, as laid out in the Business for Britain prospectus for Brexit. "Leaving the EU would allow the UK to be certain of its energy security. The ability to discard damaging laws that hold back energy production and to dramatically decrease the price of energy (lowering value added tax on energy bills is an option that would immediately become available) offers real and tantalising opportunities for the UK energy sector"7. On the first point, to the extent that there are damaging laws that hold back energy production, they are national (the end to nuclear power in Germany, the ban on shale gas in France and Bulgaria, the UK withdrawal from coal etc), not EU. By contrast, the European Commission tries (admittedly very feebly) to promote nuclear power, and despite all the environmentalists' calls for EU restrictions on shale gas exploitation has come up with its weakest possible regulatory response - a 'recommendation' of good environmental practice in any extraction of shale gas. On the second point about lowering VAT on energy, that

<sup>&</sup>lt;sup>6</sup> Business for Britain, Change or Go, page 485, July 2015.

<sup>&</sup>lt;sup>7</sup> Business for Britain, Change or Go, page 494, July 2015.

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does not seem a realistic option, in or out of the EU, given that the UK Treasury is still struggling to close the UK's big budget deficit and that reducing energy taxes would undermine energy efficiency.

• UK influence in international climate negotiations. The UK has prided itself in being, along with France and Scandinavian members of the EU, instrumental in sustaining the ambition of EU climate goals. With Brexit, this influence inside the EU would disappear, and probably outside the EU too. The global scope of the United Nations climate negotiations is such that only the big players or big blocs count, not a medium-sized European state by itself.

Withdrawal from the EU could pose practical problems closer to home. In guitting the EU, the UK would have to consider the implications for the Northern Ireland part of its electricity (and to some extent gas) system, which are closely integrated with an EU state - Ireland. Since 2007 there has been an all-Ireland electricity market, with the state-owned Eirgrid of the Republic owning the grid north and south and acting as the transmission system operator. Northern Ireland increasingly imports electricity from the Republic which in turn is increasingly dependent on gas imports from the UK. In principle, there is no reason why these flows should be affected by a possible Brexit; by leaving the EU the UK would step outside the EU's common external tariff system, but wholesale energy trade is not subject to tariffs anyway. Moreover, the single Irish electricity market is underpinned by UK and Irish legislation, and not EU legislation. However, in practice, Brexit would create uncertainties, especially if a future UK government wished to impose different regulatory and market structures on its own systems. One of Ireland's many concerns about Brexit is that if the 'Great Britain' market (i.e. England, Wales and Scotland) were to become increasingly independent of the EU, increased interconnection with the British mainland would become problematic for Ireland, a country whose energy connections are all via the UK. Ireland's only diversification route would be to lay cables to France, which would be expensive. Most English and Welsh voters in the referendum would probably pay less heed to Irish concerns about a vote for Brexit than to views in Scotland, where a victory for the Brexit side might well spark a second independence referendum and a Scottish request to accede to the EU as a separate state. The consequences of England/Wales and Scotland finding themselves on the opposite of an EU border, and the disruption that this could cause to the tightly integrated GB energy market, have been explored in an OIES paper on the 2014 Scottish referendum<sup>8</sup>.

The half-way house of the EEA? The UK could retain almost all of the benefits of EU membership and avoid some of the Brexit-related complications with regard to Ireland - if it were to negotiate an energy relationship akin to what Norway has under its membership of the European Economic Area (EEA). But EEA membership would involve more or less automatic acceptance of all the energy rules decided in Brussels. The UK, like Norway, might be consulted by the Commission on early legislative initiatives but have no vote in the two bodies that actually decide EU legislation - the Council of Ministers and the European Parliament. Whether the UK would be as willing as Norway to accept such hand-medown rules from the EU is very doubtful. Moreover, EEA membership also effectively involves accepting EU law and rules on competition policy and state aid. The latter is important, because government involvement, always considerable in energy, has further increased through the need to arrange public subsidies for renewable energy. The legal authority of the Commission to prevent EU governments spending their own money helping their own companies on their own soil - in the greater interest of preventing distortions in the EU single market - is perhaps the most supranational element in EU law. It is therefore something that Brexit Britain might well reject. If so, the alternative relationship that Switzerland has with the EU might seem, superficially, more attractive to the UK. Except in the one sector of civil aviation, Switzerland does not accept EU competition law and state aid rules. Partly for this and many other political reasons, however, Switzerland has no formal energy agreements with the EU, though it is part of the ETS and has multiple de facto energy trading links by virtue of its position right in the middle of the EU. The UK is not.

<sup>&</sup>lt;sup>8</sup> Energy Policy for an Independent Scotland: Continuity or Change? Malcolm Keay, OIES, 2013

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In any event it would not necessarily be in the UK's power to determine what sort of relationship it would have with the EU post-Brexit. The arrangements would need to be negotiated and the negotiating climate might well be hostile, so the outcome could well be something less attractive than either the Swiss or the Norwegian model. In addition, the negotiations would undoubtedly take some time and create prolonged uncertainty, which would be likely to inhibit investment – and therefore both energy security and the decarbonisation process. In other words, there would be risks.

## Conclusion

The discussion above suggests that, as with many other aspects of a possible Brexit, the nature of the outcome in the event of a 'Leave' vote is not clear; it would depend on negotiations which have yet to take place. In any event, energy is not the main issue at stake in the debate – in practice, the UK has followed an energy policy of its own choosing and has had considerable influence on the development of EU policy. It also benefits from the opening of EU markets, and the collective approaches to decarbonisation and energy security. There may therefore be pragmatic arguments for staying in as far as energy is concerned; however, those who attach over-riding importance to the UK's sovereignty and freedom of manoeuvre (particularly in relation to climate change measures) might favour energy Brexit for reasons of principle.