

# Brexit and the Energy Sector

Andrew Whitehead\*

Unless events really do take an unexpected and dramatic turn, the United Kingdom will leave the European Union (EU) at midnight (Brussels time) on 29<sup>th</sup> March 2019. Whether that departure will be planned and orderly, or a fall down the proverbial cliff edge, is at the time of writing still unclear.

How will the energy sector - both in the UK and in the rest of the EU - be impacted by the so-called Brexit?

(a turnout of 72.2%), of which a slim majority - 51.9% - voted to leave<sup>4</sup>.

This first-ever invoking of Article 50 set a 2 year clock ticking. If nothing else is agreed, from 30<sup>th</sup> March 2019, around 12,000 pieces of EU law will cease to apply in the UK.<sup>5</sup> And EU agencies and institutions will cease to have any remit in the UK. This will create an immediate legal vacuum in the UK of unprecedented scale.

The UK government, and its Parliament in Westminster, has been preparing for this legal vacuum with an increasing sense of urgency.

## Brexit – the law

To answer this question, we need to go back to the very beginning, or rather back to 29<sup>th</sup> March 2017 when, in exercise of a power conferred by the UK Parliament<sup>2</sup>, Theresa May handed over to Donald Tusk the UK's formal notification under Article 50 of the Lisbon Treaty<sup>3</sup> that it wished to leave the EU.

This momentous step was in consequence of a non-binding, “advisory only”, decision of the UK electorate following a referendum which took place in the UK on 23<sup>rd</sup> June 2016, asking the simple question: “Should the United Kingdom remain a member of the European Union or leave the European Union?” A total of 46.5m UK citizens voted

## The European Union (Withdrawal) Act 2018

The UK legislation to facilitate Brexit has already been enacted in readiness. On 2<sup>nd</sup> July 2018, the European Union (Withdrawal) Act 2018<sup>6</sup> (EUWA 2018) became law. This Act has far reaching effect in the UK.

Unlike many other countries in the Europe, the UK has a “dualist” legal system. This means that international agreements – such as the Treaty on

\*Andrew Whitehead, Head of Energy Shakespeare Martineau LLP, London

<sup>2</sup> European Union (Notification of Withdrawal) Act 2017

<sup>3</sup> Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, 13 December [2007] C 306/01

<sup>4</sup> ‘EU Referendum results’ (Electoral Commission) <<https://www.electoralcommission.org.uk/find-information-by-subject/elections-and-referendums/past-elections-and-referendums/eu-referendum/electorate-and-count-information>> accessed 27 September 2018

<sup>5</sup> ‘Brexit: UK sets out plans to replace all EU laws’ (BBC News, 30 March 2017) <<https://www.bbc.co.uk/news/uk-politics-39439554>> accessed 14 September 2018

<sup>6</sup> European Union (Withdrawal) Act 2018

the Functioning of the European Union (TFEU)<sup>7</sup> – do not create rights for individuals in UK courts. Rights are only created by the enactment of UK laws to give effect to those international agreements.

Hence the importance of the European Communities Act 1972<sup>8</sup> (ECA 1972), which gives legal effect to the EU Treaties and other EU law in the UK. Directly applicable EU law, notably EU regulations, only have legal effect in the UK because the ECA 1972 says so.<sup>9</sup> And the ECA 1972 contains a mechanism for the creation of secondary legislation by which many of the EU Directives have been implemented in the UK over the years<sup>10</sup>.

So, the main purpose of the EUWA 2018 is to repeal the ECA 1972, effective from exit day. When the ECA 1972 ceases to be effective, all of that EU law in force in the UK will fall away.

However, this legal lacuna will then be immediately plugged, because the EUWA 2018 goes on to import, from exit day, most existing EU law into domestic UK law; a necessary measure in order to preserve the integrity and completeness of the UK legal system. This repatriation of EU law into UK law, so-called “retained EU law”, will include directly effective EU energy legislation, such as the Network Codes and Guidelines, and REMIT<sup>11</sup>.

Crucially, this will then allow the UK Parliament to review all of this retained EU law, including the 8,000 or so pieces of existing UK law which has been introduced since 1972 to implement EU Directives, and decide which elements it wants to keep, change or repeal. The approach here will clearly determine the extent to which the UK’s laws and regulations after Brexit gradually diverge, or instead remain aligned with, EU laws and regulations.

Somewhat controversially, the EUWA 2018 also gives power to UK ministers, for 2 years after exit day, to make “corrective” changes to retained EU law, and also to a wide range of other existing UK law, that would otherwise not work properly once the UK has left the EU.<sup>12</sup> This is a massive task; to sift through a vast quantity of legal provisions to identify anything which refers to an EU institution,

system or regime or which is otherwise predicated on the basis that the UK is an EU member state. These so called “Henry VIII” powers allow government ministers to make law without significant Parliamentary scrutiny, and are named after an old English law from 1539, which gave King Henry VIII power to legislate by proclamation<sup>13</sup>.

Whilst there are certain controls on these law making powers conferred on ministers, there have been plenty of concerns raised in the UK about due process and Parliamentary scrutiny. Some commentators have argued that the UK has “taken back control” (using the mantra of those in the UK who argued to leave the EU) by giving unprecedented law making powers to the executive. The UK government rejects talk of a “democratic deficit”, but clearly has had concerns that, if the job was left to the UK Parliament, Parliament might grind to a halt with the sheer volume of legislation to scrutinise and debate. The UK government has estimated that around 800 pieces of secondary legislation will be needed in order to complete this correction exercise<sup>14</sup>.

But this is not just a job for the politicians and law makers. UK regulators and industry bodies have been engaged in extensive review processes to make changes to technical standards, rulebooks, and to industry codes and agreements, to make them work properly after the UK’s exit from the EU. Many of these changes involve policy decisions, and businesses and lobbying groups have been hard at work, and will continue to be, to ensure their interests are properly considered.

Finally, the EUWA 2018 will provide for historic decisions of the Court of Justice of the European Union (CJEU) to have the same binding precedent effect as decisions of the UK Supreme Court. This historic CJEU case law is referred to in the EUWA 2018 as “retained EU case law”, but it does not extend to CJEU decisions made after exit day.

Notably, retained EU case law does not include the EU’s Charter of Fundamental Rights, nor the “Francovich” principle conferring a right to damages against a member state for wrongful failure to implement EU directives or comply with EU law.

7 Consolidated version of the Treaty on the Functioning of the European Union [2008] OJ C115/13

8 European Communities Act 1972

9 *ibid*, Section 2(1)

10 *ibid*, Section 2(2)

11 Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency [2011] OJ L326/1

12 *ibid*, Section 8 and Schedule 7

13 The Statute of Proclamations 1539

14 ‘MPs set out how Commons committee should scrutinise Brexit legislation’ (Parliament, 9 July 2018) <<https://www.parliament.uk/business/committees/committees-a-z/commons-select/procedure-committee/news-parliament-2017/exiting-eu-scrutiny-delegated-legislation-report-published-17-19/>> accessed 14 September 2018

## Softening the “hard Brexit” – the Withdrawal Agreement

The terms of Article 50 require that agreement is reached between the UK and the EU on the terms of the UK’s withdrawal, and it is explicit that this needs to take account of the framework for the UK’s future relationship with the EU<sup>15</sup>. Implicitly, this therefore requires two agreements to be negotiated; a so-called withdrawal agreement and also an agreement on at least the framework for a future trading relationship.

The terms of a draft withdrawal agreement, and its accompanying non-binding “political declaration” establishing a framework for the future trading relationship, have now finally been settled by the respective negotiating teams. However, and perhaps unsurprisingly, what is clear is that the terms are a compromise which wholly satisfy no-one, on either side of the Brexit arguments.

The crucial element of the withdrawal agreement that will soften the so-called “hard Brexit” is the transition period (or, as the UK prefers to call it, the implementation phase). The draft withdrawal agreement provides for a 21 month period ending 31 December 2020, during which time the UK will commit to keeping its laws and regulations in alignment with the EU, submitting to ongoing jurisdiction of the CJEU – and of course, continuing to pay into the EU budget.

However, before the transition period can come into play, the withdrawal agreement will need to survive an approval and ratification process. For the UK, the EUWA 2018 requires a “meaningful vote” for the UK Parliament,<sup>16</sup> expected to take place in late December or possibly in January or early February 2019. The extent of political divisions in the two main UK political parties make Parliamentary approval of any withdrawal agreement far from certain, and the solution in the withdrawal agreement to the Northern Ireland issue has proven to be especially difficult and may yet make it impossible for the UK Parliament to accept the agreement in its current terms.

Assuming, however, that the withdrawal agreement is approved and ratified on both sides, the UK will move into a transition period immediately after exit. As mentioned earlier, the UK has already

enacted its own legislative framework to facilitate Brexit. Whilst a transition period is not explicitly contemplated in the EUWA 2018, it can be accommodated by a clause in the EUWA 2018 which allows the UK government to make provisions for a withdrawal agreement.<sup>17</sup> This would allow the two year period for making “corrective” changes to retained EU law to be pushed back, in essence providing for the status quo to continue in the interim.

## “No Deal” Brexit

The immediate risk of a “no deal”, however, lies in the prospect that the UK and EU are unable to obtain the necessary approvals and ratifications, leading to a “hard” Brexit at the end of March 2019.

In late August 2018 the UK published the first of a series of technical guidance notes, designed to provide clarity to individuals and businesses on how to prepare, in practical terms, for this “no deal” scenario. These provide a statement of unilateral intent on the part of the UK government, in various areas, regardless of the position that might be taken by the EU.

For example, in one of these notes, on state aid, the UK has stated that it will create and maintain a UK-wide subsidy control framework after Brexit, to ensure the continuing control of anti-competitive subsidies.<sup>18</sup> This will be achieved through the transposition of EU state aid rules into domestic legislation, under the mechanism as described above, which will apply to all sectors, mirroring the existing block exemptions in areas such as agriculture<sup>19</sup> and fisheries<sup>20</sup>. The enforcement and supervision of this UK state aid regime will be undertaken by the Competition and Markets Authority, the UK’s domestic competition authority.

The European Commission had previously given some guidance of its own concerning what a “hard”

<sup>17</sup> n(5) Section 9

<sup>18</sup> ‘Guidance: State aid if there’s no Brexit deal’ (Gov.uk, 23 August 2018) <<https://www.gov.uk/government/publications/state-aid-if-theres-no-brexite-deal/state-aid-if-theres-no-brexite-deal>> accessed 14 September

<sup>19</sup> Commission Regulation (EU) No 702/2014 declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union [2014] OJ L 193/1

<sup>20</sup> Commission Regulation (EU) No 1388/2014 declaring certain categories of aid to undertakings active in the production, processing and marketing of fishery and aquaculture products compatible with the internal market in application of Articles 07 and 108 of the Treaty on the Functioning of the European Union [2014] OJ L 369/37

<sup>15</sup> n(2)

<sup>16</sup> n(5) section 13

Brexit might mean, with over 60 “stakeholder notices” published in March 2018, covering a range of industries and sectors<sup>21</sup>. These don’t contain statements of intent on the EU’s part, so much as giving its own view of the implications of a “no deal” Brexit.

## The Energy Sector

So what is the clear is that the underlying situation in relation to Brexit is presently highly uncertain, and hugely political. What is less clear is what this means for the energy sector.

What follows is an overview of some of the more high profile issues for the sector presented by Brexit which have been debated by companies and commentators in the period since Article 50 was invoked, but obviously the range of impacts is vast and a comprehensive overview is beyond the scope of this article.

## The UK and the Internal Energy Market (IEM)

The UK position has consistently been that it wishes to leave the EU single market, and also the customs union. The internal energy market (IEM) forms a part of the wider EU single market, and includes European Economic Area (EEA) members Norway, Iceland and Liechtenstein as well as the EU’s 28 member states.

The IEM is governed by EU laws (two Directives<sup>22</sup> and three Regulations<sup>23</sup>) which set out common requirements for energy market participants, and harmonised energy market rules to the extent ne-

cessary for cross-border trade. Known as the Third Energy Package (building on previous legislative measures known as the First and Second Energy Packages adopted respectively in 1996 (electricity) and 1998 (gas), and in 2003), these laws were adopted in April 2009 and have the central aim of liberalising the European energy markets. Key provisions aim to unbundle energy supply from network operation, strengthen the independence of national regulators, establish centralised market monitoring and oversight, and facilitate greater cross-border cooperation between transmission system operators (TSOs).

The IEM is important to the UK, because Great Britain is physically connected to the rest of Europe by several sub-sea power interconnector cables, which allow traders to flow power to or from Great Britain; typically from Continental Europe into the UK, where power prices are invariably higher.

The UK is also connected to Continental Europe by two large gas interconnectors which import gas into the UK from the Netherlands and Belgium, the former of which is bi-directional and can also export from the UK. There is also a gas interconnector (Moffat) from Great Britain to the Republic of Ireland, supplying 40% of Ireland’s gas supplies in 2016.<sup>24</sup> However, the UK also benefits from direct pipelines to Norwegian gas supplies, as well as its own North Sea gas reserves, and hosts 3 liquefied natural gas (LNG) import terminals including Europe’s largest.

All of this makes the UK a highly liquid global trading hub for gas, and so the Brexit impacts for the gas sector are expected to be marginal. The same can’t be said for the power sector, where the Brexit implications have the potential to be much more profound.

### Existing UK power interconnectors

Power interconnectors allow electricity to flow between neighbouring countries, with power flowing typically in the direction of higher prices. Interconnector revenues derive from “congestion rents”, received from users of the interconnector who trade cross border to take advantage of this price differential. By allowing excess capacity to be used across jurisdictions, interconnectors deliver many advantages: they put downward pressure on energy

21 ‘Read more on Brexit preparedness notices (European Commission) <[https://ec.europa.eu/info/brexit-preparedness/brexit-notices-explanation\\_en](https://ec.europa.eu/info/brexit-preparedness/brexit-notices-explanation_en)> accessed 1 October 2018

22 Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [2009] OJ L 211/55 and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC [2009] OJ L 211/94

23 Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 [2009] L 211/36, Regulation (EC) No 714/2009 of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 [2009] OJ L 211/15 and Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators [2009] OJ L 211/1

24 ‘A look at the Irish gas market’ (Eriva, November 2017) <<https://www.gas-networks.ie/corporate/company/our-network/irish-gas-market-overview/A-Look-at-the-Irish-Gas-Market.pdf>> accessed 27 September 2018

prices; they reduce the need to build new power plants; they reduce the risk of black-outs; they provide back-up cover for intermittent renewables; and they encourage market integration.

The UK currently has 4GW of connected power interconnector capacity, to France, Belgium and the Netherlands, which equates to roughly 5% of UK generation capacity. Another 7.7 GW of capacity is planned or will be under construction by 2022.<sup>25</sup>

This general direction of flow - into the UK - has facilitated the deployment of UK renewables, and enhances UK security of supply. But reverse flows have also happened in recent times, notably into the France to provide back-up power to cover the loss of nuclear power during nuclear plant outages.

The question posed by Brexit is, how will day to day operation of the existing interconnectors be affected, and what is the impact on the planned new interconnectors?

It does seem unlikely that either the UK or the EU will impose tariffs on gas or electricity flows over these interconnectors. Even if the UK-EU trading relationship reverted to World Trade Organisation (WTO) terms under a “hard” Brexit, the EU’s tariff on electricity imports is set at zero, and on gas is only 1.7% which is not, in any event, applied. More likely, we might see tariffs on imports and exports of energy related products such as electrical components and energy efficiency products.

Of more concern in relation to the operation of the existing power interconnectors would be the extent of the UK’s participation in the IEM under a future trading agreement, since the rules of the IEM currently dictate how interconnector capacity is allocated, and more particularly allow capacity to be automatically allocated implicitly through day ahead market coupling.

The rules here are vitally important to the optimal use of interconnectors, and are found in two of the Network Guidelines<sup>26</sup>, introduced under the Third Package legislation.

Inherent in the idea of market coupling is that the participating countries are subject to regulatory alignment, in other words, the same rules and regulations apply to the power and gas markets

on either side of each interconnector. After Brexit, this may no longer be the case, of course, dependent on the extent to which the UK Parliament may choose (or, subject to the terms of any trade agreement with EU, is permitted) to change its EU retained law in this area as contemplated by the EUWA 2018.

Whilst the Network Guidelines contemplate the possibility of market coupling with a “third country”, this is only on the basis that the third country has adopted the IEM rules and regulations<sup>27</sup>.

Market coupling is estimated to have delivered around £100m of annual savings for the UK consumer, and the coupling of the UK day ahead market to the wider North West European markets undoubtedly delivers benefits to neighbouring countries in terms of access to the Great Britain market and enhanced security of supply.

However, the prospects of the UK remaining market coupled after Brexit are acutely tied to the politics.

First, the Network Guidelines, like all other aspects of the IEM rules, are governed by the EU legal system, and notably subject to the jurisdiction of the CJEU. However, leaving the direct jurisdiction of the CJEU after Brexit is one of the UK’s so-called “red lines”.

Second, the UK has proposed, as part of the framework for the future trading relationship, a “common rulebook” for the energy sector<sup>28</sup>, in other words, an ongoing commitment to regulatory alignment to the IEM, so as to facilitate ongoing market coupling. But this would require some creativity from the negotiating teams in order to overcome the UK’s CJEU red line. Furthermore, and more fundamentally, the IEM is a part of the single market, and the European Commission has a red line of its own, which is “no cherry picking”. It is argued in response that an exception should be made for electricity trading because it is essentially a closed market defined by its fixed wires connections.

In light of these difficulties, contingency planning has been underway, which would see the UK interconnectors reverting to explicit auctioning of day ahead capacity products.

<sup>25</sup> Ofgem “Great Britain and Northern Ireland Authorities Reports 2017” [2017] p28

<sup>26</sup> Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management [2015] OJ L 197/24 and Commission Regulation (EU) 2016/1719 establishing a guideline on forward capacity allocation [2016] OJ L 259/42

<sup>27</sup> Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management [2015] OJ L 197/24, Article 1

<sup>28</sup> HM Government “The Future Relationship Between the UK and the European Union” [July 2018]

Less efficient optimisation of interconnector capacity in this way might be expected to lead to higher consumer prices in the UK, and perhaps more volatility, which actually might create greater arbitrage opportunities and lead to greater cross border trading. And further volatility might follow from the “uncoupling” of Great Britain’s two power exchanges.

## New power interconnectors

The related question posed by Brexit is how the potential new interconnectors currently under development might be impacted.

As mentioned, the UK currently has 4GW of connected power interconnector installed, with more due to be commissioned in 2019. And as recently as August 2018, the Great Britain energy regulator Ofgem gave preliminary approval to three new electricity interconnector cables, connecting the UK to France, Norway and Germany, bringing to 16 GW the amount of new UK interconnector capacity planned or under construction.

In a perfectly unconstrained world, there would eventually be sufficient interconnection to allow prices in neighbouring markets to harmonise, and congestion rents would come to an end. However, this is unlikely to occur between the UK and Continental Europe, because of the difference in fuel mixes and usage, different operational costs and timing differences in system peaks. The EU has recognised for some time the benefits of interconnectors, and has set a minimum 10% electricity interconnection target for all Member States by 2020, and 15% by 2030<sup>29</sup>. Since the current UK interconnectors represent around half this 2020 target, and one third of the 2030 target, the promotion of UK interconnectors has been a priority of the EU.

And that target has been backed up by hard cash. The Trans-European Networks for Energy (TEN-E) regulation<sup>30</sup> identifies the need for infrastructure development to strengthen cross border interconnections, and every two years a list of Projects of Common Interest (PCIs) is drawn up. PCIs benefit from access to the Connecting Europe Facility

(CEF) fund – €30 billion to boost energy, transport and digital infrastructure between 2014 and 2020.<sup>31</sup>

If the UK comes out of the IEM, this financial support is at risk, although in relation to PCIs from a legal perspective it is clear that PFI projects may straddle the EU border, and could therefore accommodate interconnectors connecting Great Britain to the EU.

As part of its no-deal Brexit planning, the UK government has nonetheless guaranteed funding for UK promoters with a CEF grant that has been made or agreed before exit day. This will be done by revoking the CEF regulation<sup>32</sup> as it applies in the UK and replacing it with specific powers introduced to enable payments to be made by UK government in place of the CEF grant awards. Similar conditions and certification requirements will apply as with the grant agreements made with the Innovation and Networks Executive Agency (INEA) appointed by the EU Commission to manage the CEF fund.

The TEN-E regulation as it applies in UK domestic law will also be revoked, with a saving provision in respect of the streamlined permitting process for PCIs in the UK. This will preserve the validity of the statutory permit granting procedure where this has started but not concluded at the exit date.

Access to funding is particularly important for the Great Britain interconnectors, because they have typically been financed by private developers.

The traditional continental model in Europe is for TSOs to build interconnectors as part of their network investment, with the cost and revenues socialised across their consumer base. This “regulated” model anticipates ownership of interconnectors as part and parcel of a TSO’s regulated asset base, and requires third

29 ‘Communication from the Commission to the European Parliament and the Council Achieving the 10% electricity interconnection target Making Europe’s electricity grid fit for 2020’ (*EUR-Lex*, 25 February 2015) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2015:82:FIN>> accessed 14 September 2018

30 Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) 715/2009 [2013] OJ L 115/39

31 ‘Projects of Common Interest’ (*European Commission*) <<https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>> accessed 27 September 2018

32 Regulation (EU) No 1316/2013 of the European Parliament and of the Council establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010 [2013] OJ L 348/129

party access, regulated pricing and restriction on use of revenues.

However, the EU rules<sup>33</sup> allow a developer to become an interconnector TSO and apply for exemption from these requirements, which enables interconnectors to be built on a so-called “merchant” basis, with full revenue (price and volume) risk taken by the developer outside of the TSO regulatory regime. This merchant route has been popular in the UK.

The cap and floor regime is a third approach, introduced for the first time by Ofgem and Belgian energy regulator CREG in 2014 to facilitate the development of the “Nemo” link between Great Britain and Belgium. This regime sits alongside the exemption route, and is designed to achieve a sharing of risk between the developer and consumers on one or both sides of the link.

That sharing is achieved by a mechanism which sets a maximum (cap) and minimum (floor) level to the revenues earned by the developer; the floor operates as a “top up” for the developer from consumers if revenue falls below the specified level, whilst the cap ensures that high returns are passed back to consumers. The width between cap and floor is designed, at least in theory, to allow a level of guaranteed debt service and at the same time an incentive to maximise benefits.

Important here is the market coupling of day ahead capacity, and in due course within day capacity, which takes away volume risk for the developer. As has been mentioned, for the UK, market coupling may not survive a “hard” Brexit.

## **Governance of the IEM**

There is a secondary issue for the UK in this context, which is whether it can negotiate into the future trading arrangements any meaningful participation in the governance of the IEM alongside ongoing participation.

The IEM rules are developed by two bodies which have a key role in the EU energy markets – ENTSO-E and ENTSO-G. These are institutions made up of TSOs in Europe. Also important is the Agency for the Co-operation of European Regulators (ACER), whose membership is made up of each of the national regulatory authorities across the EU.

Current ENTSO and ACER rules will make the UK a policy taker after Brexit. Whilst ACER allows participation by regulators from non-EU Member States as observers, they have no voting rights. And whilst TSOs can be members of ENTSO-E and ENTSO-G where their home country is not an EU Member State, the voting rights of non-EU TSOs are restricted.

That said, the scope for UK involvement in ENTSO-E and ENTSO-G after Brexit would appear to be relatively straightforward, because those bodies are not derived from EU legislation but are effectively international non-governmental bodies with flexible decision making. In contrast, ACER is established by, and derives its governance from, the Third Package legislation. Indeed, ENTSO-E already counts amongst its members the transmission system operators from non-EU member states such as Norway and Switzerland.

Given the key roles that these bodies have in the IEM, if the UK is going to have any kind of ongoing role in the IEM then it will certainly want to negotiate some continuing participation – at the very least membership of the various ENTSO-E and ENTSO-G working groups. And this could be a good result for the EU, not just for the UK. The UK has played an instrumental role in design and development of the IEM, and its pro-market influence has been a major counter-balance to some of the more “protectionist” voices in Europe.

<sup>33</sup> Regulation (EC) No 714/2009 of the European Parliament and of the Council on Conditions for Access to the Network for Cross-Border Exchanges in Electricity repealing Regulation (EC) No 1228/2003 [2009] OJ L 211/15

## Euratom

The European Atomic Energy Community (Euratom) was founded by the Treaties of Rome in 1957, with the aim of creating a European market for nuclear technical expertise and know how in the peaceful pursuit of science and nuclear energy. All EU Member States automatically become members of Euratom<sup>34</sup>.

Whilst technically Euratom is separate from the EU, since 1967 it has shared the EU institutions such as the EU Commission and the CJEU. The ambiguous manner in which Article 50 of the Lisbon Treaty<sup>35</sup> cross-applies to Euratom means that it might have been possible for the UK to leave the EU without also leaving Euratom. Article 106a of the Euratom Treaty states that Article 50 of the TFEU “shall apply to this Treaty” – and it is a basic question of interpretation whether invoking Article 50 therefore automatically triggers exit from Euratom, or whether instead exit from Euratom requires a separate Article 50 notice.

However, for this interpretation to make sense, clarificatory amendments would have been needed to prevent the UK continuing to have full participation rights in the shared EU institutions after Brexit. This point quickly became academic, however, because in its Article 50 notice the UK government signalled its intention to leave Euratom simultaneously with its departure from the EU.

All of this is a great significance for the UK, because nuclear power is a key component of the current and future UK energy mix; eight existing nuclear power stations provide around 20% of the UK’s electricity needs. And the UK is a nuclear-armed state.

Whilst nuclear safety is unaffected by Brexit, in the sense that safety of UK nuclear installations is already overseen by the UK nuclear regulator, the Office for Nuclear Regulation (ONR), there are many problems for the UK to solve associated with an exit from Euratom on 30<sup>th</sup> March 2019.

For example, the UK becomes a third country after exit from Euratom, and absent any other agreement, that means that UK operators importing relevant nuclear materials from EU countries may need to obtain an import licence.

More generally, the UK’s civil nuclear trade with certain third countries outside of the EU is governed by a number of Nuclear Cooperation Agreements (NCAs) negotiated by Euratom on behalf of its members with those third countries, which include the United States and Australia. These NCAs will cease to apply to the UK after Brexit. Discussions to agree new bilateral NCAs with priority countries is ongoing, and scheduled to be completed before exit date.

Progress here is dependent on non-proliferation safeguarding. Euratom carries this out on behalf of the International Atomic Energy Authority (IAEA), and it is relevant to note that Euratom’s safeguards are higher than the international standards. The UK’s plan has been to develop and put in place a new UK safeguards regime, and indeed legislation has now been passed<sup>36</sup> so that the ONR can oversee domestic safeguards instead of Euratom. The UK has now also signed new international agreements with the IAEA to replace the existing trilateral agreements between the IAEA, Euratom and the UK. The most pressing task remaining for the ONR is to recruit and train sufficient inspectors in time.

There are some other quirks. Under Euratom Treaty arrangements, all special fissile material in any EU country is legally “owned” by Euratom, although operators holding legal title have the unlimited right of use so long as they comply with Euratom obligations. On exit from Euratom, Euratom ownership of fissile material in the UK will end. Furthermore, after exit, UK operators wishing to enter into supply contracts for nuclear material will no longer need to obtain approval from the Euratom Supply Agency, although approval will still be required if the supply involves an EU established operator.

The transfer of radioactive materials to and from the EU is understandably highly regulated and, of more practical significance to UK companies, these rules will apply after exit day to transfers of radioactive materials between the EU and the UK. This could have implications for a range of industries, including healthcare.

Finally, once the UK exits Euratom, EU rules on new shipments of spent nuclear fuel and radioactive waste to third countries will apply to shipments to the UK, although existing arrangements will continue under current contractual arrangements.

<sup>34</sup> Consolidated Version of the Treaty Establishing the European Atomic Energy Community, 2012/C 327/01 [2012] OJ C 327/1

<sup>35</sup> n(2)

<sup>36</sup> Nuclear Safeguards Act 2018

## Energy commodity trading

Energy companies across Europe trade a variety of physical and financial trading products, and as previously mentioned, those trades can relate to cross border flows across interconnectors between Great Britain and Continental Europe. It is therefore important that the future trading arrangements between the UK and EU accommodates a clear and consistent interface between commodity and financial markets, with a high degree of regulatory alignment.

For the physical markets, of importance is the Regulation on Market Integrity and Transparency (REMIT)<sup>37</sup>, which is an EU regulation, introduced in phases from 2011, creating a bespoke market abuse regime for the wholesale energy markets. Administered by ACER and national energy regulators, it prohibits insider trading and market manipulation, whilst also requiring the reporting of wholesale energy transactions and the public disclosure of certain inside information. All the indications are that the UK is highly likely to want to keep in place a UK law which mirrors REMIT.

However, central to some of its provisions is a registration system for market participants entering into the wide range of reportable transactions. Notably, there is no third country equivalence mechanism built into REMIT, which means that UK based market participants registered with the Great Britain regulator, Ofgem, will need to register a second time, with the national energy regulator in one of the EU jurisdictions where they are active.

In the financial markets, there are similar recognition issues, for example in relation to the European Market Infrastructure Regulation<sup>38</sup> (EMIR), which governs OTC derivatives contracts, such as weather derivatives.

For example, EMIR requires that “over the counter” (OTC) derivative clearing must take place through Central Clearing Counterparties authorised and established in the EU, or in a third country recognised by ESMA. UK clearers will therefore need ESMA recognition. The same goes for UK trade repositories. Furthermore, any derivative traded on a UK regulated market may no longer fulfil the EMIR requirements of an “exchange traded derivative”,

37 Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency [2011] OJ L326/1

38 Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories [2012] OJ L 201/1

as the UK market will no longer be an EU regulated market. So, unless the UK market is granted equivalence status, those UK traded derivatives will become OTC, and subject to, for example, mandatory clearing and risk mitigation techniques.

## Renewables

The Renewable Energy Directive 2009<sup>39</sup> (RED) requires the UK to generate 15% of its energy from renewable sources by 2020, and at least 10% of final energy consumption in the transport sector must come from renewables. A recast Renewable Energy Directive<sup>40</sup> (REDII) has been under discussion as part of the EU’s clean energy package<sup>41</sup> to update RED for the period 2021 to 2030. The final compromise raises the overall EU target for renewable energy by 2030 to 32%<sup>42</sup>.

For the UK, RED and REDII sit alongside the Climate Change Act 2008<sup>43</sup> (CCA 2008), which is a UK law which imposes legally binding carbon reduction targets on the UK government. These targets are built around a long-term target for a reduction in GHG emissions in 2050 by 80% (from a 1990 baseline), with a system of five year carbon budgets which set interim targets to keep the UK on track to meet its 2050 target. The fifth carbon budget was approved in the summer of 2016 (after the Brexit referendum), and commits the UK to a 57% reduction in emissions by 2030.

The CCA 2008 is intended to provide a stable legal framework for investment in the UK green economy, including deployment of renewable energy, although there are projected shortfalls against the fourth and fifth carbon budgets.

Nonetheless, it is quite possible that the UK, which is struggling to meet its 2020 RED obligation, will wish to abandon RED and REDII after Brexit, with a view to allowing itself more flexibility to meet its domestic carbon reduction targets by other means.

39 Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC [2009] OJ L 140/16

40 Proposal for Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast) COM/2016/0767 and Procedure 2016/0382/COD

41 ‘Clean Energy for All Europeans’ (European Commission) <<https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>> accessed 28 September 2018

42 Europe leads the global clean energy transition: Commission welcomes ambitious renewable energy development in the EU (European Commission, 14 June 2018) <[http://europa.eu/rapid/press-release\\_STATEMENT-18-4155\\_en.htm](http://europa.eu/rapid/press-release_STATEMENT-18-4155_en.htm)> accessed 27 September 2018

43 Climate Change Act 2008

Probably of more immediate concern for developers of UK renewables projects is how the UK will maintain its carbon price support (CPS) mechanism if and when the UK leaves the EU Emissions Trading Scheme, as mentioned below. The CPS, introduced by the UK government in April 2013<sup>44</sup>, affects the price of carbon in the UK power generation market by requiring fossil fuel generators to pay a carbon support price by way of “top up” to the EU ETS allowance price up to a specified carbon floor price.

Developers, and their funders, will also wish to know what new funding the UK government is able to offer to supplement its recent commitment (outlined above) to underwrite existing EU funding lines such as CEF grants in a “hard” Brexit scenario.

Brexit also raises some problematic recognition issues, which could hinder renewables deployment if not addressed, although the UK government has indicated its current intention to unilaterally recognise EU certifications for UK purposes. For example, the UK’s version of Guarantees of Origin Certificates are known as REGOs (Renewable Energy Guarantees of Origin). REGOs are issued by Ofgem, and after Brexit will cease to be recognised in the EU, and this may compromise UK renewable generators exporting to an EU-based supplier.

Similarly, there is a certification scheme<sup>45</sup> for installers of small scale biomass boilers, solar PV and thermal schemes. Certifications awarded in the UK will cease to be recognised in the EU after Brexit, so that UK installers may require separate certification to operate in the EU.

## Energy Efficiency

The Energy Efficiency Directive 2012<sup>46</sup> establishes a set of binding measures to help the EU meet its 20% energy efficiency target by 2020. All Member States are required to use energy more efficiently at all stages of the energy supply chain, from production to final consumption. On 30<sup>th</sup> November 2016, the EU Commission proposed an update to the Directive<sup>47</sup>, including a new 30% energy efficiency target for 2030, which was implemented in May 2018.

There are three other key pieces of EU law in this area. The Ecodesign Directive 2009<sup>48</sup> sets standards for energy consumption across a wide range of domestic products, whilst the Energy Labelling Directive 2010<sup>49</sup> requires products to display their energy consumption. The Energy Performance of Buildings Directive 2010<sup>50</sup> sets a target for all new buildings to be “nearly zero energy” by 2010, and requires Member States to set minimum energy standards for major standards and refits, and to ensure inclusion of energy performance certificates in sale and rental advertisements.

All of these Directives have been implemented in UK law, and those UK laws will remain in force after exit day. However, it remains to be seen whether any trade agreement will permit the UK to relax red tape in this area, or whether in the event of a “hard” Brexit the UK will choose to do so.

## EU Emission Trading Scheme

The Emissions Trading Scheme (ETS) is the EU’s flagship policy instrument to drive down carbon emissions. Established by its own Directive<sup>51</sup> in 2003, it is not strictly a part of the IEM, but sits alongside it, and requires heavy industrial users to

46 Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC [2012] OJ L 315/1

47 Directive (EU) 2018/844 of the European Parliament and of the Council amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency [2018] OJ L 156/75

48 Directive 2009/125/EC of the European Parliament and of the Council of establishing a framework for the setting of ecodesign requirements for energy-related products [2009] OJ L 285/10

49 Directive 2010/30/EU of the European Parliament and of the Council on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products [2010] OJ L 153/1

50 Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings [2010] OJ L 153/13

51 Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC [2003] OJ L 275/32

44 Announced by the UK Chancellor in the 2011 budget, and charged through a component of the Climate Change Levy. See further: ‘Carbon Price Floor (CPF) and the price support mechanism’ (House of Commons Library, 8th January 2018) < <http://researchbriefings.files.parliament.uk/documents/SN05927/SN05927.pdf>> accessed 1 October 2018

45 Microgeneration Certification Scheme

purchase tradeable certificates (allowances) to cover their emissions. The ETS currently contains 31 members, covering all of the states within the EEA.

In response to a trend of low EU ETS prices, the UK introduced its own top-up carbon price floor in 2013, known as the Carbon Price Support mechanism, to set a minimum level for the total carbon price in the UK. This has meant a higher UK carbon price compared to the rest of the EU, and has led to calls from UK industry for a relaxation after Brexit to stimulate UK competitiveness. The UK carbon floor has also helped to drive coal generation almost completely out of the UK energy mix.

However, in recent times EU ETS prices have been increasing as the emissions cap has been tightened in order to meet the EU's 2030 target for an overall reduction in emissions of 40% below 1990 levels.

Whilst the UK could remain in the ETS after Brexit – non-EU countries Norway, Liechtenstein and Iceland participate, and Switzerland recently signed an agreement to link its own scheme with the ETS – unless the UK government's red lines turn pink, then the UK cannot remain in the scheme after Brexit as it is within the direct jurisdiction of the CJEU. Furthermore, the UK would not expect to have any meaningful influence after Brexit over the future development of the ETS.

That said, there is a strong benefit to the UK in staying involved with the ETS one way or another, because the UK is committed to market mechanisms to help it achieve its own very ambitious carbon reduction targets in the CCA 2008.

There would also appear to be a clear benefit to the EU in having the UK remain in the ETS. As the second largest emitter in the EU ETS, a withdrawal by the UK would depress demand for allowances, thereby exerting a downward pressure on prices, and the UK has itself been a keen proponent of the ETS and loss of its influence might see a reduction in level of ambition by the EU in this area.

At the very least, and assuming the no-deal “hard” Brexit scenario can be avoided, the expectation is that, if the UK leaves the ETS, then that will not happen until the end of Phase 3 of the scheme on 31<sup>st</sup> December 2020, coinciding with the end of the transition period. Whether the UK leaves on exit day, or at the end of Phase 3, its departure will trigger changes to the ETS, notably the recalculation of the emissions cap and the volume of allowances set aside for auction.

But the prospect of a disorderly exit from the ETS as part of a “no deal” Brexit is worrying, and the UK and EU have already taken steps in preparation. The UK government introduced regulations<sup>52</sup> in December 2017 to bring forward the surrender date for ETS allowances in respect of the 2018 compliance year, to 15<sup>th</sup> March 2019, ahead of the exit date. In addition, in its budget announcement of October 2018<sup>53</sup>, the government announced details of a new Carbon Emissions Tax, to take effect if the UK exits the ETS on 29<sup>th</sup> March 2018 in the event of a “no deal” (although it will not apply to the aviation sector). Whilst the main structure of this tax (notably, the initial rate of £16/tonne) will be introduced in the Finance Bill 2018-19, there will be a consultation on the more detailed arrangements for the tax, which will take place in 2019.

It is intended that this new tax would operate alongside the existing greenhouse gas emissions permitting, monitoring and verification rules which will be retained in the UK. UK operators would still therefore be required to measure and report emissions annually, but instead of surrendering ETS allowances those operators would be subject to the new tax on their reported emissions in excess of a specified emissions allowance (set for 2019 and 2020 at the level of free allocation of ETS allowances under Phase 3). It follows that, in the event “hard” Brexit on 29<sup>th</sup> March 2019, existing allowances held in the UK section of the ETS registry will no longer be accessible, and in order to hold on those allowances, operators will need to open registry accounts outside of the UK.

In turn, the EU has amended the EU ETS Registry Regulation<sup>54</sup> to provide for marking and restricting the use of allowances issued by the UK from 1<sup>st</sup> January 2018, which effectively void the allowances automatically unless surrendered before exit day or unless Brexit doesn't happen.

And once again, the island of Ireland raises particular Brexit problems. There is the issue of how to address emitters covered by the ETS in the Republic of Ireland participating in the all-Ireland single electricity market alongside emitters in Northern Ireland who are outside of the ETS, which raises the prospect of a potential distortive effect for single market pricing.

52 The Greenhouse Gas Emissions Trading Scheme (Amendment) Regulations 2017

53 Budget 2018 (HM Treasury): [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752202/Budget\\_2018\\_red\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752202/Budget_2018_red_web.pdf)

54 Commission Regulation (EU) 2018/208 amending Regulation (EU) 389/2013 establishing a Union Registry [2018] OJ L 39/3

**In conclusion, the UK's impending exit from the EU is one of the defining issues of our time. The negotiations have an unprecedented complexity, and there will remain an extended period of uncertainty over how Brexit will play out and its impact on sectors of the economies of the UK and the rest of Europe. This is as true of the energy sector as any other.**

**Of key relevance is the inescapable truth that the UK's energy system is heavily integrated with that of Continental Europe, and Ireland. Connected by sub-sea electricity interconnectors and gas pipelines, the UK's energy security of supply has a mutual dependency on that of its close neighbours. Furthermore, as a result of the liberalisation of the energy markets across Europe, the key players in the UK's energy sector are typically pan-European utilities, with interests across the Continent.**

**It is also noteworthy that the UK has played a pivotal role in the development of many of the EU's policies in this area. In particular, it was an early mover in decarbonisation efforts and especially in the deployment of renewable energy, notably offshore wind, helped by a domestic agenda which includes self-imposed long term binding targets, very much in alignment with EU targets.**

**So with all of this in mind, many remain hopeful that a common position can be reached by the UK and EU, that will see as many as possible of these common benefits preserved as part of a new post-Brexit world.**