

Considerations for continued UK participation in the EU Emissions Trading System (EU ETS) – short-term issues

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Introduction and summary

Energy UK is the trade association for the GB energy industry with a membership of over 90 suppliers, generators, and stakeholders with a business interest in the production and supply of electricity and gas for domestic and business consumers. Our membership encompasses the truly diverse nature of the UK's energy industry – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership.

Our members turn renewable energy sources as well as nuclear, gas and coal into electricity for over 26 million homes and every business in Britain. Over 619,000 people in every corner of the country rely on the sector for their jobs with many of our members providing long-term employment as well as quality apprenticeships and training for those starting their careers. The energy industry adds £83bn to the British economy, equivalent to 5% of GDP, and pays over £6bn in tax annually to HM Treasury.

This discussion paper builds on the Energy UK position paper on “Brexit and the EU ETS”¹ and focuses on the short-term issues arising from UK participation in the EU ETS.

Energy UK's preference is for the UK to remain within the EU ETS whilst retaining influence over its future development so as to deliver a robust carbon price signal. Preferred scenarios for the UK's involvement in the EU ETS after Brexit are set out in Annex 1.

The reasoning behind Energy UK's position on participation in the EU ETS in the current phase is driven by the need to ensure a degree of forward certainty and an equitable trading relationship with the EU's Internal Electricity Market (IEM). This paper provides more information on the market impacts of the UK leaving the EU ETS:

- Impacts on the EU ETS market and
- Impacts on the UK electricity market.

A UK exit from the EU ETS with short notice would be particularly disruptive, whenever it occurred, and this would have direct impacts on the EU ETS price and on GB, Irish and connected electricity markets.

To avoid negative market impacts if the UK were to exit from the EU ETS in March 2019, Energy UK requests that the UK's continued participation in Phase III of the EU ETS until the end of 2020 is confirmed by both the UK and the EU **by October 2017**. This would provide an 18-month lead time ahead of an otherwise potentially disruptive UK exit from the EU ETS in spring 2019.

¹ Energy UK “Position on Brexit and the EU Emissions Trading System (EU ETS)”, February 2017, EnvC WGEUETS 15/17.

Likewise, a decision on UK participation in the EU ETS after 2020 should be addressed by **October 2018**, to give more than 2 years' lead time to any UK exit from the EU ETS at the end of 2020.

The market impacts of leaving the EU ETS

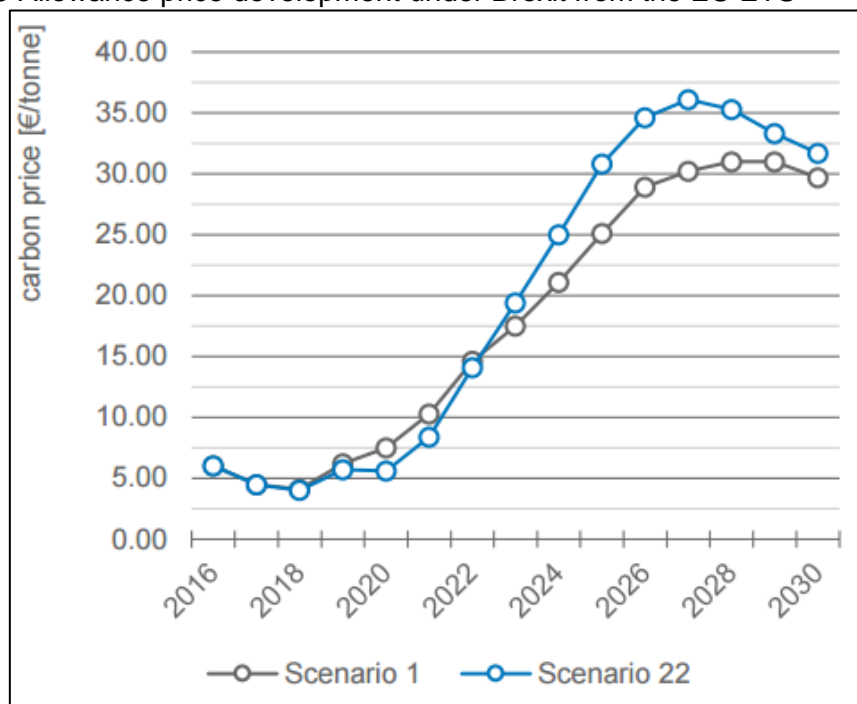
If the UK were to leave the EU ETS, this would result in impacts on both the EU ETS and the UK electricity market.

- **What are the impacts for the EU ETS?**

Firstly, it should be noted that the EU ETS is the only legislative commodity market across the EU. Electricity, gas and other commodities will continue to flow after the UK exits the EU as their trade is driven by commercial contracts. However, the EU ETS could have installations that in effect disappear overnight if they are no longer in the system or required to comply. A UK exit from the EU ETS would affect all EU ETS participants.

For the recent EU ETS Directive revision, Eurelectric commissioned analysis looking at many different scenarios for consideration by policymakers². One of the scenarios assessed was a UK exit from the EU ETS at the end of Phase III, with UK allowances removed from the overall cap. As Figure 1 shows, in the event of an orderly exit from the EU ETS at the end of Phase III (Scenario 22, as compared to the baseline Scenario 1 based on the expected revision of the EU ETS Directive for Phase IV), the EU ETS price would initially be expected to fall as UK participants offload allowances they have acquired for hedging purposes or received as free allocations to mitigate carbon leakage. In the longer term, the EU ETS would be expected to tighten as the UK is a net supplier of allowances.

Figure 1. EU Allowance price development under Brexit from the EU ETS



² ICIS Tschach Solutions/Eurelectric (2016) - *Options to Strengthen the EU ETS* - http://www.eurelectric.org/media/295165/icis_study_options_to_strengthen_the_eu_ets_fin-2016-oth-0104-02-e.pdf

The structural question as to how the EU ETS cap would be adjusted if the UK were to exit the EU ETS needs to be addressed. The analysis in Figure 1 assumes that UK allowances would be removed from the Phase IV cap starting in 2021 in an orderly approach. However there is no precedent for how this would be done.

The UK currently accounts for 10% of EU ETS emissions, therefore not adjusting the EU ETS after a UK exit would significantly impact the supply-demand balance and thus price.

Whilst Figure 1 shows the structural supply balance in the EU ETS if UK allowances were removed after exit, it does not reflect the potential price impacts of market sentiment and, importantly, political adjustments by the EU Member States.

- **What are the impacts for the UK electricity market? – Directly and indirectly**

Direct impacts – The UK electricity market³

If a UK exit from the EU ETS takes place without sufficient lead time, it will impact UK electricity prices. To hedge price risk, electricity market participants trade electricity some years in advance, giving generators certainty of a price for their output and allowing suppliers to protect consumers from volatile commodity markets. Ofgem has previously noted that much of this hedging takes place between 1 and 3 years ahead of delivery⁴. Long-term uncertainty will impact how much trading will be done nearer to real time, exposing both generators and customers to potential spot market volatility.

Energy UK estimates that the EU ETS currently reflects roughly £1.50/MWh of the average baseload electricity price in GB of around £40/MWh.

As spring 2019 approaches, the uncertainty over whether the EU ETS will be a cost for UK electricity generators will have an impact on all market participants' hedging strategies. For example, if the UK exited the EU ETS at short notice, hedged UK electricity generators would still hold allowances no longer required for compliance purposes, but these would have an economic value on the market to non-UK EU ETS participants (value depending on EU ETS dynamics).

Conversely, if it is confirmed that the UK is remaining in the EU ETS at short notice, UK electricity generators may not have hedged beyond spring 2019 and would be exposed to any changes in the EU ETS price between now and then in acquiring allowances for post-2019 compliance purposes.

Either way, UK electricity suppliers would need to adjust their behaviour to mitigate the risk that the EU ETS costs may not be reflected in wholesale electricity prices, adding a risk premium for consumers. There would also be negative implications for market liquidity beyond spring 2019 until clarity is given, adversely impacting all market participants.

Whilst this will mainly impact electricity markets in the UK, given Northern Ireland operates a Single Electricity Market (SEM) with Ireland, this will also have an impact on consumers in Ireland. To a lesser degree, this would also impact markets connected to GB by distorting cross-border trade.

³ The impacts on UK electricity markets are intended to be indicative (by looking at structural changes in the market). This paper does not make an attempt to predict market participant behaviour.

⁴ Ofgem, *Wholesale Energy Markets in 2016*, 3 August 2016.

Indirect impacts – The free trading of electricity with the EU’s Internal Electricity Market (IEM)

Both Energy UK and Eurelectric have called for free and fair trading of electricity after the UK has left the EU⁵. A larger, more integrated electricity market has potential benefits for consumers in the UK and those elsewhere in Europe, by allowing for capacities and resources to be shared across borders to reduce costs, improve security of supply and better integrate renewable electricity, provided that there are no significant distortions arising from the lack of a level playing field.

The nature of electricity means that industry needs to match supply and demand instantaneously and, as it cannot currently be stored in significant volumes, electricity has unique characteristics which require equivalent and fair regulatory regimes on both sides of an interconnector. If not, the regulatory rules can define whether a power station in one country runs instead of another, having an impact on wholesale electricity prices and, importantly, security of supply in either country.

The EU ETS has the potential to ensure that an equivalent carbon cost is paid by electricity generators across Europe. However, it could be a condition that the UK prices carbon at least at the equivalent of the EU ETS price for the UK electricity sector to have a free-trading relationship with the EU’s Internal Electricity Market (IEM), particularly for Northern Ireland given the SEM with Ireland.

Carbon price differential between the UK and the EU, combined with building out more interconnection capacity, exposes the UK electricity system to risk of carbon leakage (where higher carbon generation is located on the continent) with implications for UK security of supply and/or capacity costs as well as overall system costs.

- **What should be done to prevent these impacts?**

A UK exit from the EU ETS with short notice would be particularly disruptive, whenever it occurred, and this would have direct impacts on the EU ETS price and on GB, Irish and connected electricity markets.

A potentially disruptive UK exit from the EU ETS in spring 2019 is now less than 2 years away, and the behaviour of market participants will be influenced by the current situation.

Given there will only be 6 months between a draft UK-EU Brexit agreement in October 2018 and a potential disruptive exit from the EU ETS in spring 2019, Energy UK would welcome early clarity **by October 2017** on the UK’s intentions for Phase III (end of 2020), as well as comfort from the EU institutions that this would be agreeable.

The EU ETS is within the jurisdiction of the Court of Justice of the European Union (CJEU) and therefore the structures of a transitional deal will need to include early agreement on a transition to ensure that any jurisdictional gap can be filled.

There are other technical aspects that will need to be resolved even if the UK remains in the EU ETS, both at the UK and EU level, such as the role of exchanges or auctioning platforms.

⁵ Eurelectric (2017) – Post Article 50 statement on UK-EU Internal Energy Market relationship - http://www.eurelectric.org/media/314749/eurelectric_post_article_50_statement_on_uk-2017-030-0229-01-e.pdf

These more technical issues can be overcome as long as a solution to jurisdictional transition to the CJEU is signalled early on.

However, it must be remembered that even an exit from the EU ETS after Phase III is now less than 4 years away, and at the point the UK leaves the EU, this eventuality will be less than 2 years away. Whilst the UK should look to reach a high-level agreement to avoid a disruptive EU ETS exit by October 2017 as a priority, it should also look to provide clarity for the post-2020 future for carbon trading in the UK **by October 2018** as the market impacts listed above will become increasingly problematic as the end of 2020 approaches.

For further information contact:

Andy Limbrick

Environment Consultant
Energy UK
Charles House
5-11 Regent Street
London SW1Y 4LR

Tel: +44 20 7747 2924

andy.limbrick@energy-uk.org.uk
www.energy-uk.org.uk

India Redrup

Policy Assistant
Energy UK
Charles House
5-11 Regent Street
London SW1Y 4LR

Tel: +44 20 7747 2924

india.redrup@energy-uk.org.uk
www.energy-uk.org.uk

ANNEX 1: Energy UK - Preferred scenarios for UK's involvement in the EU Emissions Trading System (EU ETS) after Brexit – August 2017

This note summarises the position of Energy UK members with regards to the UK's relationship with the EU ETS after Brexit. It is intended to outline Energy UK's preferred scenario and highlight the likely impact of other possible outcomes. For ease of analysis, the paper looks separately at Phase III and Phase IV. It should however be noted upfront that Energy UK's preferred scenario is for the UK Government to announce as early as possible that it is open to remaining in the EU ETS until the end of Phase IV (2030). For some of the scenarios, the paper also outlines the various steps to be taken and the tight schedule the UK Government will be operating under.

Phase III (up until 31 December 2020)

<u>Preferred Outcome for Phase III:</u>		
<ul style="list-style-type: none"> • The UK remains in the EU ETS until at least the end of Phase III. • A transitional arrangement including legal jurisdiction is agreed to prolong UK's participation until 31 December 2020. • Clarity is provided by UK Government on continued participation in the second half of 2017 (ideally by October). • Relevant EU ETS provisions are transferred into UK law through the European Union (Withdrawal) Bill in time for exit. • Market impact: In the event of an orderly exit from the EU ETS at the end of Phase III the EU ETS price would initially be expected to fall as UK participants offload allowances they have acquired for hedging purposes or received as free allocations to mitigate carbon leakage. In the longer term, the EU ETS would be expected to tighten as the UK is a net supplier of allowances. 		
<u>Other possible outcomes (in order of increasing negative impact)</u>	<u>Market impacts</u>	<u>Legal impacts for UK ETS installations</u>
The UK remains until the end of Phase III but this is only confirmed at a very late stage (a few months before March 2019).	<ul style="list-style-type: none"> • Market uncertainty prevails until the end of Phase III, reducing the impact of Phase IV reform adoption. • Carbon prices remain low but overall negative impact on Carbon Market is limited. • With a short notice period, UK electricity generators may not have hedged beyond Spring 2019 and would be exposed to any changes in the EU ETS price between now and then in acquiring allowances for post-2019 compliance purposes. 	<ul style="list-style-type: none"> • UK ETS installations remain compliant until the end of the Phase. • Court of Justice of the European Union (CJEU) jurisdiction is temporarily maintained for dispute resolution until 31 December 2020.
The UK decides to leave the EU ETS in March 2019 – with the intention to set up an interim compliance arrangement for UK operators. One option is to implement a UK ETS and for this to be linked with the EU ETS (“UK	<ul style="list-style-type: none"> • The UK is currently a net supplier of allowances so supply drops in Carbon Market after exit, boosting prices in the mid-term. • Linking UK ETS to EU ETS will likely take several years, fuelling uncertainty in the market. 	<ul style="list-style-type: none"> • The UK disengages part-way through a calendar compliance year and a trading phase. Logistical difficulties for UK participants. • Questions arise over compliance during transition phase leading to linking of the two schemes.

<p>Mirror Scheme model” below). Other interim options are available.</p>		<ul style="list-style-type: none"> • Questions arise over access to ETS registry, impact on auctioning timetable and volumes, etc.
<p>Negotiators fail to agree on a transitional arrangement for Phase III and the UK leaves the EU ETS at short notice. No prospect of a UK ETS to be linked with the EU ETS.</p>	<ul style="list-style-type: none"> • A short timeline would demand more extreme adjustments regarding hedging and banking – and this could trigger more significant drops in EU Allowance (EUA) prices (ICIS⁶). • Havoc on the carbon market in Q1 2019, due to rapid liquidation of banked allowances by UK participants (ICIS). • If the UK were to exit the EU ETS at short notice, average spot electricity prices in GB could drop somewhere in the region of £1.50-3.00/MWh and therefore any contract for delivery after Spring 2019 would need to account for this uncertainty. • The EU ETS is expected to tighten after UK exit because the UK is currently a net supplier of allowances. 	<ul style="list-style-type: none"> • The UK disengages part-way through a calendar compliance year and through a trading phase. • UK participants no longer comply with their numerous obligations under the 2012 UK ETS Regulations – they face civil penalties of the order of £15 billion annually.

⇒ **“UK Mirror Scheme”**: What would it mean in terms of steps to take and timing?

October 2017	2017 – 2018	March 2019
<p>European Union (Withdrawal) Bill does not preserve EU ETS arrangements for Phase III.</p>	<p>Development of parallel GB emissions trading scheme – to be linked to EU ETS – requires primary and secondary legislation and regulations (18 month timescale), including establishment of institutional infrastructure (such as registry of allowances, etc.).</p> <p>Parallel UK-EU negotiations on linking UK and EU carbon schemes (timescale TBC); discussions include the establishment of a dispute resolution mechanism⁷.</p> <p>Confirmation of future trajectory of GB Carbon Price Floor at 2017 Budget.</p>	<p>GB leaves ETS mid-Phase and transitions to mirror scheme for long term.</p> <p>GB scheme participants required to account for ETS allowances mid-Phase.</p> <p>The timescale is very tight to develop a scheme, issue new permits and start operating a fully functioning mirror scheme, all by March 2019.</p>

⁶ ICIS (2016) Options to strengthen the EU ETS http://www.eurelectric.org/media/295165/icis_study_options_to_strengthen_the_eu_ets_fin-2016-oth-0104-02-e.pdf

⁷ Negotiations on linking the Swiss ETS to the EU ETS concluded in January 2016 after 5 years of talks, but the linking has not yet come into effect due to unrelated political issues. Arguably the UK ETS could be linked more quickly if it retained the same design and specifications as the EU ETS but a quick linking process is unlikely.

Phase IV (1 January 2021 – 31 December 2030)

Preferred Outcome overall (for Phase III and IV):		
<ul style="list-style-type: none"> • The UK remains in the EU ETS until the end of Phase IV (2030). • The UK Government provides clarity for the post-2020 future for carbon trading in the UK by October 2018. • The UK is able to retain some form of influence on EU ETS developments during Phase IV, or a possibility to withdraw on reasonable notice if material change is made to the scheme, adversely impacting the UK. • The UK accepts continued CJEU jurisdiction until 2030 (unlikely, Scenario 1 below) or an alternative dispute resolution mechanism is found to allow continued UK participation (Scenario 2 below). • Market impact: The impact will be determined by whether the supply of allowances is adjusted or not after Brexit, or whether the EU ETS cap is adjusted. The EUA price will increase after Brexit except if supply is not adjusted at all, in which case prices could be depressed. • Political impact: The UK remaining in the EU ETS is also of benefit to the EU-27. It would limit disruptions and prevent a further crisis of confidence for the EU ETS. It would also avoid reopening hard-fought compromises on the 2030 targets and the establishment of the Modernisation Fund. Should the UK remain in the EU ETS, it might generate goodwill and leverage in other areas of the Brexit negotiations. 		
Other possible outcomes	Market impacts	Legal impacts
<p>The UK remains in the EU ETS until the end of Phase IV but loses all possibilities to influence. It did, however, have a strong influence on the design of the scheme before Brexit.</p>	<ul style="list-style-type: none"> • During Phase IV, the EUA price would <u>hopefully</u> go up as a result of the Market Stability Reserve (MSR) kicking in in 2019. The EU ETS will be further tightened when the MSR outtake rate increases to 24% (depending on final deal on Phase IV reform in Trilogue negotiations). • If on the other hand the EU ETS price remains depressed (for example as a result of conflicting EU targets or policies), the continuation of the GB Carbon Price Floor remains essential to drive investments in low-carbon generation. UK generation continues to be disadvantaged across interconnectors and the EU ETS fails to create a level-playing field. Pursuing increased interconnection could be put into question as a result. • The EUA price will be on the rise after Brexit in 2030 except if supply is not adjusted at all, in which case prices could be depressed (ICIS). 	<ul style="list-style-type: none"> • UK participants could be asked to comply with a mechanism that is not able to deliver a robust carbon price – without any possibility to change it. • A bespoke dispute resolution mechanism governs UK participation during Phase IV (in Scenario 2 below).

⇒ **“Continuing Participation Model – CJEU/non-CJEU”**: What would it mean in terms of steps to take and timing?

The European Union (Withdrawal) Bill, the adoption of new emissions legislation and regulations, and the development of a bespoke arbitration body will take a very long time to finalise. The timetables below show the urgency of the work required, and the dependency on wider EU agreement for Scenario 2.

“Continuing Participation Model – CJEU”			
	October 2017	2017-2018	December 2020
Scenario 1	Confirm status of Phase III – preserve existing arrangements through European Union (Withdrawal) Bill /Primary legislation (6 month timescale).	Transitional arrangements of exit agreement confirm GB will continue in EU ETS and accept CJEU jurisdiction. UK transposes revision of the EU ETS Directive for Phase IV and other implementing measures**	Phase III EU ETS concludes, Phase IV begins – GB participates on an equal basis with other participants* but without direct influence over rules.

“Continuing Participation Model – Non CJEU”			
	October 2017	2017 – 2018	December 2020
Scenario 2	Confirm status of Phase III – preserve existing arrangements through European Union (Withdrawal) Bill /Primary legislation (6 month timescale).	Development of a bespoke arbitration body to replace CJEU. Parallel UK-EU negotiations on acceptability of new arbitration body.	Phase III EU ETS concludes - Phase IV begins – GB participates on an equal basis with other participants* but under the jurisdiction of a bespoke arbitration body and without direct influence over rules.

* Under this model, UK also accepts continuing EU State Aid and competition laws.

** Phase IV implementing measures are likely to require secondary legislation and will include things such as the creation of the Modernisation Fund.