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Via email: energyintensiveindustries@beis.gov.uk

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Response to BEIS Consultation: Energy Intensive Industries – Review of the schemes to compensate energy intensive industries for indirect emissions costs in electricity prices

Dear Sirs,

UKPIA represents the eight main oil refining and marketing companies operating in the UK. The UKPIA member companies – bp, Essar, Esso Petroleum, Petrolneos, Phillips 66, Prax Refining, Shell and Valero – are together responsible for the sourcing and supply of product meeting over 85% of UK inland demand, accounting for a third of total primary UK energy¹.

The refining and downstream oil sector currently lies at the centre of the UK economy. It provides a secure supply of affordable energy for road and rail transport, aviation and marine applications, as well as for commercial and domestic heating. It also supplies feedstocks for the petrochemicals sector, along with specialised non-energy products such as lubricants, bitumen for use in road surfacing, and graphite for use in electric vehicle batteries and as electrodes in steel and aluminium manufacture.

The sector, therefore, has an opportunity to be at the heart of an orderly and just transition to a Net-Zero economy. By reinventing itself, using its extensive resources to decarbonise its activities and products, the sector has an important role also in future supply of new energy carriers and technologies such as hydrogen, energy storage and carbon capture, utilisation and storage.

As acknowledged in the Consultation Document, electricity prices for UK EIs are amongst the highest in Europe. The majority of UK industries therefore face higher electricity costs than most countries in the EU-27, leading to competitive distortions and increased risk of carbon leakage.

It is therefore important that the UK continues to consider use of a full set of policies (including electricity pricing policy) to manage the risk of carbon leakage and loss of

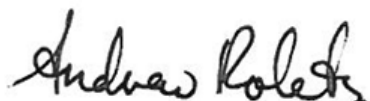
¹ [BEIS Digest of UK Energy Statistics \(DUKES\) 2021 Tables 3.2-3.4.](#)

competitiveness and at the same time, longer term policies to support early investment in EII decarbonisation projects, many of which may increase electricity consumption. Many UK policies are also currently under review (including free allocation of allowances under the UK ETS, to be followed by further review of the role of free allocation); this creates policy uncertainty which may delay investment decisions.

It is important too that the EII compensation schemes are not undermined by policy changes elsewhere, for example, the [Ofgem Access and Forward-looking Charges Significant Code Review and Targeted Charging Review](#). Policy certainty is critical for investment decisions and is of particular importance for decarbonisation projects in sectors looking to electrification to drive emissions reductions. Within the refining sector, there are examples of smaller electrification projects (such as use of heat pumps or motorised drives for rotating equipment) where the EII compensation schemes themselves can make a difference between a negative return on investment (ROI) and a more positive outcome.

UKPIA welcomes the opportunity to respond to the consultation on Review of the schemes to compensate energy intensive industries for indirect emissions costs in electricity prices. Our responses to the questions posed in the consultation document are given in Attachment 1.

Yours faithfully,



Dr Andrew Roberts
Director – Downstream Policy

cc:	Michael Duggan	BEIS
	Simon Stoddart	BEIS
	Mike Mackay	BEIS

Attachment 1

UKPIA Response to BEIS Consultation: Energy Intensive Industries – Review of the schemes to compensate energy intensive industries for indirect emissions costs in electricity prices

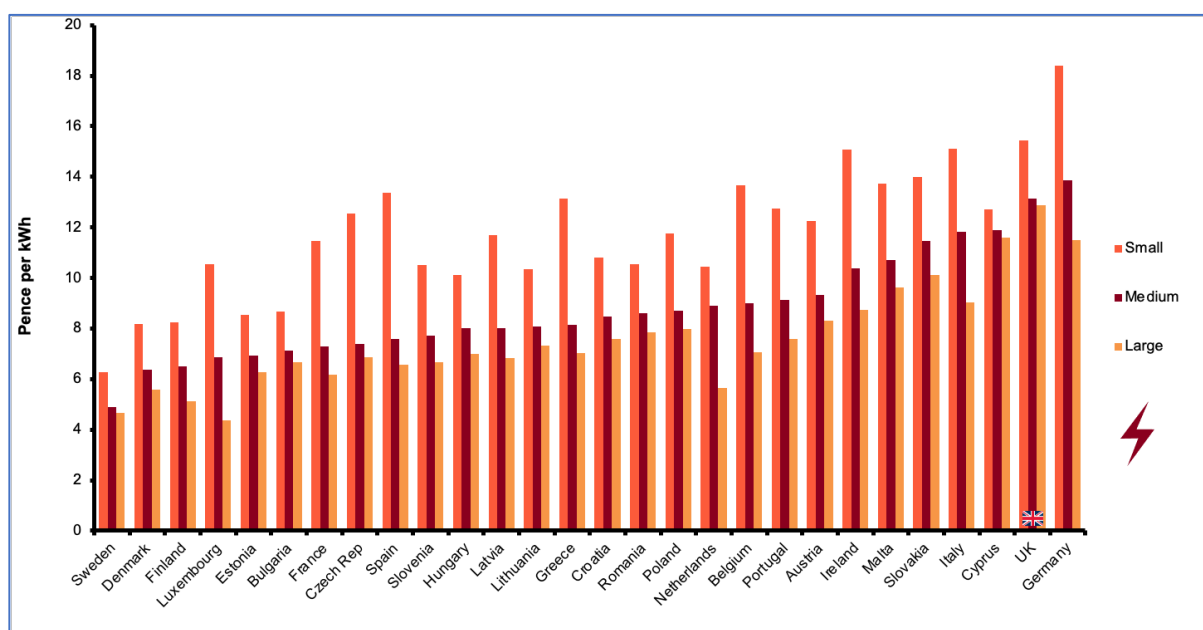
Analytical approach to carbon leakage

Q1.	To what extent do you agree with the risks and evidence of carbon leakage for UK EIs?
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The high-level assessment of the risks of carbon leakage and challenges to competitiveness for UK EIs from energy costs presented in the consultation document is broadly supported. However, the combination of high UK energy costs and the sharp rise in UK ETS compliance costs at current allowance prices of around £42/tCO₂e², also create a barrier to investment in decarbonisation projects – the very projects carbon pricing policies are intended to support.

As acknowledged in the Consultation Document, electricity prices for UK EIs are amongst the highest in Europe at around 130-140p/kWh³ (Table 1).

Table 1. Average industrial electricity prices in the EU27 plus UK (including taxes)



Source: BEIS QEP 5.4.1

The majority of UK industries therefore face higher electricity costs than most countries in the EU-27, leading to competitive distortions and increased risk of carbon leakage. It is therefore important that the UK continues to consider use of a full set of policies (including electricity pricing policy) to manage the risk of carbon leakage and loss of competitiveness and at the same time, longer term policies to support early investment in EII decarbonisation projects, many of which may increase electricity consumption. Many UK policies are also currently under review (including free allocation of allowances under the UK ETS, to be

² UKA Auction clearing price on 14th July 2021 from ICE.

³ BEIS Quarterly Energy Prices Tables QEP 3.4.1 and QEP 5.4.1 to 5.4.4.)

followed by further review of the role of free allocation)⁴; this creates policy uncertainty which may delay investment decisions.

Q2.	Is there any evidence of carbon leakage through indirect carbon emissions that you think has been missed in this section?
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UKPIA note that many of the sources referenced in the BEIS Research Paper “UK Business Competitiveness and the Role of Carbon Pricing”⁵ conclude that there is no evidence of strong carbon leakage under the EU ETS from direct EU ETS costs. Carbon leakage protection measures, in particular the allocation of free allowances to sector exposed to carbon leakage, have been effective but under these circumstances, it would be even more unlikely to find evidence of carbon leakage caused by indirect carbon emissions costs. Removing or weakening those measures will inevitably result in carbon leakage, in particular under more challenging emission reduction targets.

Eligible sectors

Q3.	To what extent do you agree with the proposed methodology to determine sector eligibility?
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UKPIA agree with the criteria identified for quantitative assessment to determine sector eligibility included in the proposed methodology. Use of similar eligibility criteria under EU ETS Phase 4 has resulted in addition of the refining sector to the list of eligible sectors under the [EU ETS State Aid Guidelines](#).

UKPIA understand the proposed methodology differs from the methodology used under the EU ETS State Aid Guidelines, with respect to the requirement that sectors pass the quantitative assessment before assessment against the qualitative criteria. If a sector passes the quantitative assessment and subsequently passes the qualitative assessment, it will be eligible for compensation. The criteria used in the qualitative assessment are market characteristics; profit margins; abatement potential; and fuel substitutability:

Market characteristics

Care should be exercised in the assessment of the ability of a sector to pass through indirect emissions costs. The refined petroleum products market has a complex structure, with many different factors influencing the final cost and pricing to end consumers. The market structure includes the supply chain from crude oil production through to refining, supply and distribution and sale of finished petroleum products and is often misunderstood and subject to over-simplification. Essentially, there are three separate, but interconnected markets – the crude oil market (which is global/regional), the traded finished product market (largely regional) and the retail and commercial markets, where products are sold to end consumers, where participants are largely price takers at a country/local level but influenced by competition from imports.

Although econometric techniques to examine cost pass-through have been used to assess carbon leakage risks for a number of sectors, they depend on accurate modelling of the market structure and production economics (including marginal costs)⁶, which may not be available in the public domain. This is certainly the case for the refining sector.

⁴ The [BEIS call-for evidence on the UK ETS Free Allocation Review](#) made in April 2021 announced the intention to consult on setting a net zero consistent cap trajectory later in 2021, presenting this as the start of a process of UK ETS reform.

⁵ [BEIS Research Paper Number 2020/017, UK Business Competitiveness and the Role of Carbon Pricing, April 2020.](#)

⁶ Use of econometric analysis as the basis for assessment of cost pass through was considered by the UK Office of Fair Trading (OFT) in 2014. OFT commissioned a report by RBB Economics which provides a useful critique of available

Abatement potential

Although operators may have scope for reduction of electricity consumption through implementation of energy efficiency projects, these can be disruptive and must be prioritised against other cost and decarbonisation projects and viewed in the context of available profit margins and other investment opportunities elsewhere. For the refining sector, energy costs are second to feedstock costs and receive constant focus - global benchmarking has been used for over 30 years, both intra-company and at sector level⁷, to drive down energy costs and refinery efficiency.

The priority for the refining sector is deep decarbonisation through feedstock substitution, carbon capture, low carbon liquid fuel technology and production of hydrogen at scale for third party use.

Q4.	To what extent do you agree with the proposed list of sectors and subsectors that will be assessed under the proposed methodology for sector eligibility?
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UKPIA welcomes the inclusion of the refining sector⁸ in the proposed list of eligible sectors in Annex A of the Consultation Document.

Q5.	Are there any sectors or subsectors that are at risk of carbon leakage and should be considered? Please give evidence of carbon leakage.
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The risk of carbon leakage in the refining sector is well-established within the EU ETS⁹ and acknowledged under the UK ETS with the allocation of free allowances. See also responses to Questions 2, 3 and 4.

Business level test

Q6.	Do you agree with our proposal to retain the business level test and its exemptions? Please provide an explanation or information to support your view.
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UKPIA agrees with the proposal to retain the business level test and its exemptions where a significant proportion of the business activity concerns manufacture of eligible products. It is also important that all UK manufacturers operating in an eligible sector and exposed to the same risks of carbon leakage are eligible for compensation to avoid competitive distortion.

techniques. The report "Cost pass-through: theory, measurement and potential policy implications, is available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/320912/Cost_Pass-Through_Report.pdf.

⁷ The six UK refineries all subscribe to the Solomon Associates benchmarking studies – see <https://www.solomoninsight.com/services/benchmarking/refining>.

⁸ SIC Code 19.20, Manufacture of refined petroleum products and, potentially, Prodcom 20.11.11.50, Hydrogen.

⁹ This follows assessment against the criteria set out in Article 10b of Directive 2003/87/EC (as amended). See [Commission Delegated Decision \(EU\) 2019/708](#).

Subsidy intensity

Q7.	Do you agree with our proposals to keep the subsidy at 75%, but also limit the indirect total emission cost due to the UK ETS and CPS to 1.5% of a company's GVA in a respective year? Please provide an explanation or information to support your view.
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UKPIA broadly agrees with the proposals to keep the subsidy at 75% (or to increase this to 85% or more) and also to limit the indirect total emission cost due to the UK ETS and CPS to 1.5% of a company's GVA in a respective year. The compensation scheme should be kept as simple as possible to provide support to EIs against indirect ETS (and CPS) costs related to electricity consumption.

As regards the level of subsidy intensity, the overall context is also important. The EI Compensations schemes provide only a level of compensation against indirect emissions costs associated with electricity use. They are not intended to provide compensation against high UK electricity prices, which are set by UK electricity pricing policy. (See also responses to Questions 1 and 14.)

Q8.	What would be the impact of lowering the aid intensity to 65% rather than 75%? Please provide an explanation or information to support your view?
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Although a reduction in subsidy intensity from 75% to 65% would reduce the overall policy costs, this would also erode the level of protection available against the risk of carbon leakage and reduce competitiveness against most EU competitors, especially in the context of high UK industrial electricity costs and anticipated growth in electricity consumption to implement deep decarbonisation technologies. (See also response to Question 1).

CO₂ Emissions factor

Q9.	Do you agree with our proposal to apply the latest figure of the estimated carbon dioxide emissions per GWh of electricity supplied for all fossil fuels from DUKES and update the formula with this figure annually? Please provide an explanation or information to support your view.
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UKPIA agree with the proposal to apply the latest figure of the estimated CO₂ intensity per GWh of electricity supplied for all fossil fuels from DUKES and to update the formula with this figure annually. This appears to provide a fair and equitable basis for providing compensation across a wide range of sectors, geographical location, and electricity sources, but also provides a level of policy certainty.

Q10.	Do you agree with our proposal to continue applying the same CO₂ emission factor to all sources of electricity supply whether auto-generation, electricity supply contracts or grid supply? Please provide an explanation or information to support your view.
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UKPIA agree with the proposal to apply the same CO₂ emission factor to all sources of electricity supply, as the marginal supplier sets the price for all sources whether auto-generation, electricity supply contracts or grid supply. See also response to Question 9.

Efficiency benchmarks

Q11.	Do you agree with our proposal to continue using the benchmarks that apply in Phase IV (2021-2030) of the EU ETS in the form of the product-specific electricity consumption efficiency benchmark, where available, or the fall-back efficiency benchmark of 80%, where not available, until having potential bespoke UK benchmarks, following the review of allocation of free allowances under the UK ETS? Please provide an explanation or information to support your view.
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UKPIA agree with the proposal to continue using the current EU ETS benchmarks until bespoke UK benchmarks are potentially available following review of free allowance allocation under the UK ETS. This represents a simple, pragmatic approach and maintains current competitive positioning with similar compensation schemes implemented by EU-27 Member States.

Conditionality

Q12.	Does your organisation currently have a plan to get to net zero?
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As a trade association, UKPIA does not have a net zero plan itself. It has no direct emissions (Scope 1) and only limited Scope 2 and Scope 3 emissions from use of leased accommodation, commuter and business travel and the products and services we use and provide.

However, the prime focus of UKPIA is now as a champion for transformation of the refining and downstream oil sector to meet the UK's Net Zero ambition. To this end, we are working with our member companies to place the sector at the heart of an orderly and just transition to a Net-Zero economy. By reinventing itself, using its extensive resources to decarbonise its activities and products, the sector has an important role in future supply of new energy carriers and technologies such as hydrogen, energy storage and carbon capture, utilisation and storage.

Q13.	If so, how do you use compensation you currently receive to deliver on that plan?
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As noted in the response to Question 1, UKPIA believes it is important that the UK continues to consider use of a full set of policies (including electricity pricing policy) to manage the risk of carbon leakage and loss of competitiveness and at the same time, longer term policies to support early investment in EII decarbonisation projects. We do not therefore support the attachment of conditionality to compensation provided under the EII compensation schemes, as these are intended only to provide a level of compensation against indirect emissions costs associated with electricity use.

It is important too that the EII compensation schemes are not undermined by policy changes elsewhere, for example, the [Ofgem Access and Forward-looking Charges Significant Code Review and Targeted Charging Review](#). Policy certainty is critical for investment decisions and is of particular importance for decarbonisation projects in sectors looking to electrification to drive emissions reductions. Within the refining sector, there are examples of smaller electrification projects (such as use of heat pumps or motorised drives for rotating equipment) where the EII compensation schemes themselves can make a difference between a negative return on investment (ROI) and a more positive outcome. In one case, UKPIA has been advised the schemes have the potential to support electrification projects

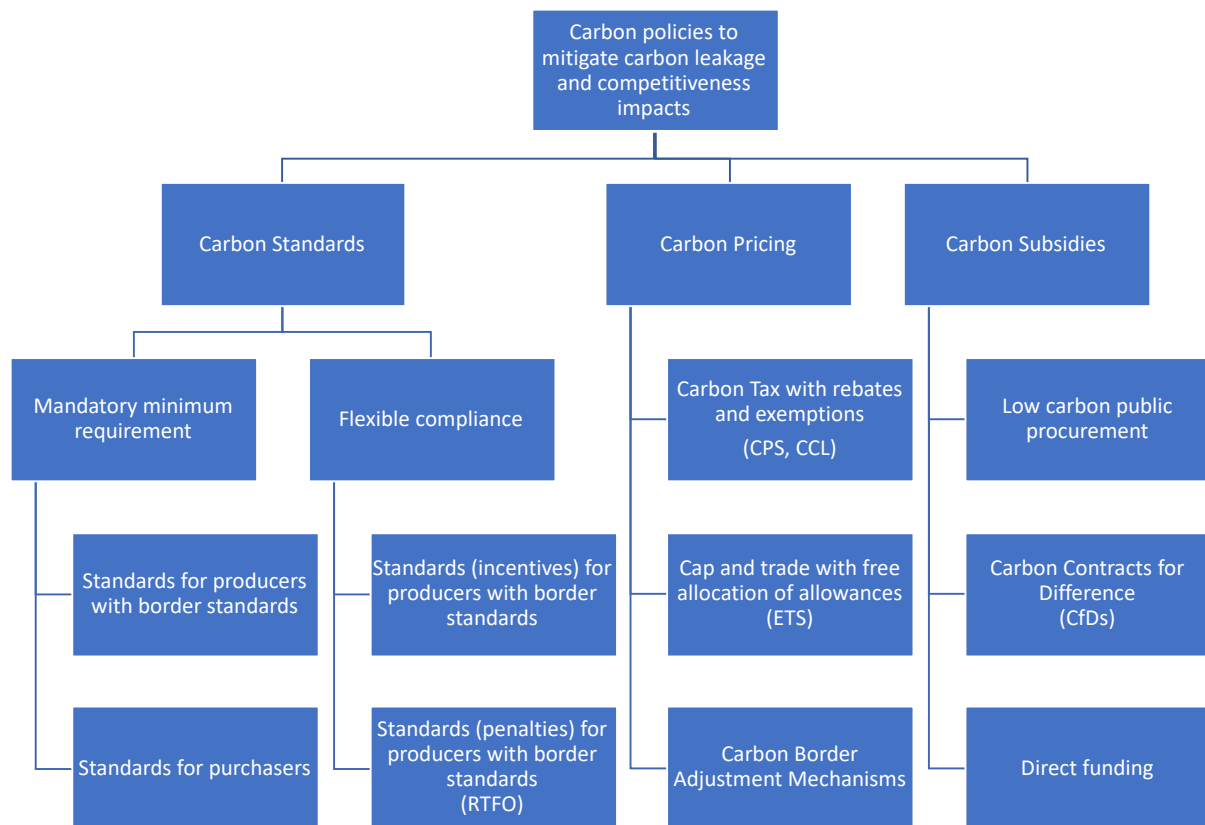
delivering an emissions reduction of 7% with a payback period of 3 to 4 years when imported renewable electricity is used; this compares to a negative ROI in the absence of compensation for indirect costs.

Q14. What conditions do you think would be most effective in incentivising greater energy efficiency or decarbonisation?

Again, UKPIA does not support the attachment of conditions to compensation provided under the EII compensation schemes, as these are intended only to provide a level of compensation against indirect emissions costs associated with electricity use. Incentives for greater energy efficiency and decarbonisation are better provided by a wide range of policy measures designed to mitigate against carbon leakage and competitiveness impacts and to support investment in energy efficiency and decarbonisation.

In this regard, the Climate Change Committee recently co-funded a study¹⁰ by Energy Systems Catapult to provide input to the Sixth Carbon Budget, HM Treasury Net-Zero Review and to inform their positioning in preparation for COP 26. The report considers a number of policy mechanisms that can be used to mitigate carbon leakage and competitiveness impacts (Diagram 1).

Diagram 1. Carbon policies used to mitigate carbon leakage and competitiveness impacts



Source: Energy Systems Catapult

Examples of current UK Government policies are given in brackets, but additional policy measures such as low carbon standards, low carbon public procurement and additional CfD

¹⁰ Energy Systems Catapult “[Industrial Decarbonisation: Net Zero Carbon Policies to Mitigate Carbon Leakage and Competitiveness Impacts](#)” (2020).

schemes (for example to support CCUS and hydrogen production and use) are also been identified under the [BEIS Industrial Decarbonisation Strategy](#).

Scheme monitoring and evaluation

Q15.	Do you agree with our proposal to expand data monitoring of the scheme? Please provide an explanation or information to support your view.
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In principle, UKPIA support the proposal to expand data reporting requirements under the EII compensation schemes, but this should be limited to avoid excessive additional administrative burden and to ensure data reported is provide only for the activities eligible for compensation under the schemes, usually at site level.

Q16.	Do you agree with the proposed data requirements for quantifying the benefits of the scheme? Please provide an explanation or information to support your view.
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UKPIA supports the concept of quantifying the benefits of the scheme, as it is important that the scheme provides value for money for the Government and delivers against the policy objectives to provide mitigation against carbon leakage and loss of competitiveness for manufacturers. If these objectives are not met, alternative policies will be required.

Q17.	Do you agree with our proposal to add additional conditions to the schemes requiring businesses to reflect compensation received in their company accounts and to spend the compensation on its electricity costs? Please provide an explanation or information to support your view.
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UKPIA does not support the proposal to add additional conditions to the schemes requiring businesses to reflect compensation received in their company accounts and to spend the compensation on its electricity costs. The UKPIA member companies are all multinational companies filing consolidated company accounts in one or more locations and the proposal to require businesses to reflect compensation received in their company accounts adds unnecessary complexity and administrative burden. However, in the interests of transparency, UKPIA supports continued reporting by BEIS [for indirect compensation payments made to industry in the UK](#)¹¹.

Similarly, as explained in the response to Question 13, UKPIA does not support the attachment of conditionality to compensation provided under the EII compensation schemes, as these are intended only to provide a level of compensation against indirect emissions costs associated with electricity use – electricity costs will always exceed the level of compensation provided. The proposed requirement is therefore completely unnecessary.

¹¹ This was a reporting requirement under Article 10a(6) of the EU ETS Directive, 2003/87/EC (as amended) while the UK was a member of the EU. UKPIA has not determined whether this requirement remains in place after EU legislation was brought into UK law via the European Union (Withdrawal) Act 2018.