Response to UK Government – Consultation on Carbon Emissions Tax

Dear Michael,

The UK Petroleum Industry Association (UKPIA) represents the eight main oil refining and marketing companies operating in the UK. The UKPIA member companies – BP, Essar, Esso Petroleum, Petrolineos, Phillips 66, Shell, Total 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 energy\(^1\).

UKPIA Member companies also own and operate the six major UK oil refineries, and together with other companies involved in the downstream oil sector, a range of critical infrastructure including 41 coastal terminals to import, export and store fuel; 20 inland terminals; 3000 miles of pipeline; and almost 8500 filling stations\(^2\). All six of the refineries are currently permitted under the EU ETS, along with other installations owned and operated by the member companies in other sectors, e.g. upstream oil and gas and chemicals.

UKPIA welcomes the opportunity to comment on the proposals for a Carbon Emissions Tax as a possible alternative to an emissions trading system – responses to the consultation questions are given in Attachment 1. Key points are as follows:

- Contingency plans are needed to ensure continuity in carbon pricing and associated carbon leakage mitigation measures applicable to installations currently participating in the EU ETS, until enduring policy measures are in place.
- Any tax should provide certainty on the cost of carbon, equivalent carbon leakage mitigation and continuity in compliance mechanisms. In addition, it should not introduce any competitive disadvantage for UK installations relative to those in third countries or the EU.

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\(^1\) BEIS Digest of UK Energy Statistics (DUKES) 2019 Tables 3.2-3.4.

• Any tax should avoid inadvertently dis-incentivising lower cost and shorter-term emission reduction opportunities by introducing restrictions on reduced tax liability or the transfer of tax emission allowances (both these elements are in the proposal). Such restrictions would undermine the UK’s ability to reduce emissions at least societal cost, as well as undermining recent investment in carbon abatement projects at integrated sites.

• Industry welcomes the opportunity to discuss the longer-term role and potential of carbon taxation in the UK. A consistent cost of carbon across all sectors - including those not currently under EU ETS - based on technology-neutrality and without overlapping regulation is the best way to lower emissions at least societal cost.

The UK refining sector has previously strongly supported continued membership of the EU Emissions Trading System (EU ETS) until at least the end of Phase III in December 2020, and its subsequent replacement by a linked UK ETS. The design of the new UK carbon pricing system should seek to maintain competitiveness with European installations remaining in the EU ETS and avoid removal of provisions that support pursuit of the lowest-cost abatement options. The UK should also continue to promote globally consistent carbon pricing to deliver on the UN FCC Paris Agreement and to avoid carbon leakage and loss of competitiveness, a key concern for the refining sector.

Yours faithfully,

Dr Andrew Roberts
Director – Downstream Policy

cc: Michael Duggan BEIS
    Simon Stoddart BEIS
    Mike Mackay BEIS
UKPIA Response to HMT/HMRC Consultation: Carbon Emissions Tax

Chapter 2: Tax emission allowances

Q1. Do you have any views on the methodology and process for setting tax emission allowances and adjusting them in light of activity level reports?

UKPIA broadly supports the methodology and process for setting tax emission allowances (TEAs) set out in the Consultation Document. However, there are a number of issues requiring attention before the proposed Carbon Emissions Tax (CET) could be considered a viable option for implementation after the end of the Brexit transition period should this option be preferred over an Emissions Trading System:

**Adjustment of the TEA to take account of the Historic Activity Level**

UKPIA note that the TEA will be adjusted in the early years of the CET if the average change in activity level is greater than +/- 15% of the Historic Activity Level (HAL). The HAL would be calculated from data submitted by existing installations for the 2019 National Implementation Measures (NIMs) exercise as set out in Commission Delegated Regulation (EU) 2019/331. This would involve calculation of the arithmetic mean of annual historical production during the 5-year baseline period 2014-2018.

The TEA would be calculated as follows:

\[ TEA = HAL \times \text{benchmark} \times \text{CLEF} \]

Where the CLEF is the carbon leakage exposure factor.

In the early years of the CET, the TEA would be set and adjusted as follows:

- **2021** The unadjusted TEA would be calculated as the arithmetic average of 2019 and 2020 production. If this activity level is greater than +/- 15% of the HAL, the TEA would be adjusted by the percentage change.

- **2022** As 2021, using the average of 2020 and 2021 production.

The arrangements for 2023 and thereafter would be subject to a review of CET policy (presumably in 2022).

In view of the reduced production levels seen in the first half of 2020 due to the COVID-19 pandemic, the TEA for many installations may well be reduced by 15% or more for 2021 and 2022, with the reduction in 2022 being even greater for those installations where the recovery in production levels takes some considerable time. Should the EU ETS allowance price remain at current levels, the reduced TEA and, as a consequence, the financial impacts on installations struggling to recover from the impacts of COVID-19, could be very damaging (see also comments below on revision of the EU ETS benchmarks).

**The refinery product benchmark**

Due to different configurations and complexity of operations, refineries have a specific and complex product benchmark under the EU ETS, which has been derived to ensure equitable treatment of very different refineries. The current refinery benchmark methodology was developed by Concawe, the European technical body for the refining sector, in conjunction with the European Commission under an agreement with Solomon Associates, a US
consultancy firm\(^3\). It is based on a proprietary benchmarking methodology used by Solomon Associates for international benchmarking of refineries for over 30 years and uses a concept of CO\(_2\) weighted tonne (CWT) to assess the carbon intensity of each refinery unit, based on feed or production rates, both in kt/year. The CWT measure must also be used in calculation of the HAL and annual activity levels.

**Revision of the refinery product benchmark**

As alluded to in the Consultation Document, the European Commission is currently undertaking a review of the product benchmarks in preparation for implementation of EU ETS Phase IV on 1\(^{st}\) January 2021. From discussions with FuelsEurope/Concawe, who themselves have been involved in discussions with the Commission (DG Clima) and the Expert Group on Climate Change Policy, UKPIA understand that:

- UK refinery data will not be included in revision of the product benchmarks as required under [Commission Delegated Regulation (EU) 2019/331](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019D0331).
- The preliminary update to the refinery product benchmark is that it will be reduced by 24%, the maximum update rate (-1.6% for 15 years).
- Driven by installations using biomass and cogeneration, the heat and fuel benchmarks are also likely to be reduced by 24%.
- Publication of the Commission Implementing Decision covering the revised product benchmarks is unlikely before Q1 2020.

Any reduction in the refinery, fuel and heat benchmarks has a compounding impact on TEA levels and again, the consequential financial impacts on installations struggling to recover from the impacts of COVID-19.

**Carbon Leakage Exposure Factor**

Under the situation where the UK introduces a domestic ETS linked to the EU ETS, UKPIA believe the linkage agreement would require the UK to use the EU ETS Phase IV Carbon Leakage List to determine any entitlement to free allowances and would require that EU ETS benchmark methodologies are also used. This would avoid any competitive distortion in the allocation of free allowances between UK and EU installations.

This situation under a standalone UK ETS or CET would be different. Use of the same methodology for assessment of carbon leakage as described under Article 10b of the EU ETS Directive, gives different results for the trade and emissions intensities for UK EU sectors compared to EU-wide assessment. This would result in a different carbon leakage list with both “winners” and “losers”, although UKPIA believe the level of mitigation against exposure to carbon leakage for UK installations overall would be improved and made more robust.

Based on data available from the BEIS Digest of UK Energy Statistics and the ONS Annual Business Surveys, the trade intensity of the UK refining sector is likely to be significantly higher than the EU average.

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\(^3\) See Concawe Report No. 9/12 "Developing a methodology for an EU refining industry CO\(_2\) emissions benchmark".
Q2. Do you agree that small emitters should have their tax emission allowance for 2022 increased by the amount of their unused tax emission allowances from 2021? Do you think that, instead, a payment scheme as outlined below for main scheme installations would be an appropriate means of incentivising decarbonisation for small emitters?

UKPIA believe that small emitters should be exempted from the CET, bearing in mind the complexity of the TEA calculation and administrative burden associated with data monitoring, verification and reporting.

As advised in the UKPIA response to the UK Government consultation on The Future of UK Carbon Pricing in July 2019, UKPIA support exclusion of small emitters below a threshold of 50 kt CO\textsubscript{2}e/year. Analysis of 2018 EU ETS compliance data published by the European Commission for UK installations with open registry accounts as at 1\textsuperscript{st} May 2019 gives the following results:

<table>
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<th>Type of installation</th>
<th>Number</th>
<th>CO\textsubscript{2} emissions, mt</th>
<th>% of total emissions</th>
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<td>128.7</td>
<td>90.93</td>
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<tr>
<td>Aviation</td>
<td>137</td>
<td>12.85</td>
<td>9.07</td>
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<tr>
<td>Total</td>
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<table>
<thead>
<tr>
<th>Type of installation</th>
<th>Number</th>
<th>CO\textsubscript{2} emissions, mt</th>
<th>% of total emissions</th>
</tr>
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<td>124.9</td>
<td>88.20</td>
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<tr>
<td>Aviation</td>
<td>18</td>
<td>12.7</td>
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<tr>
<td>Total</td>
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<td>137.6</td>
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<table>
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<th>Number</th>
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<tr>
<td>Total</td>
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The analysis indicates that use of the 50kt threshold for stationary installations and aviation would still cover nearly 95% of UK emissions included under the EU ETS for 2018, excluding
over 740 (nearly 75%) of current participants from the CET. This would reduce the administrative burden on low emitters and HMRC.

Instead, decarbonisation incentives should be provided for small emitters via alternative policy measures specifically designed for small emitters, for example, through provision of support for technologies identified in the Energy Technologies List.

Chapter 2: Payments to reward decarbonisation for main scheme installations

Q3. Do you agree that, if the Carbon Emissions Tax were to be introduced, a mechanism should be introduced to reward decarbonisation?

With revision of product benchmarks for EU ETS Phase IV, along with adjustment of the TEA level based on the HAL and CLEF, it seems certain that many installations will face a higher level of CET than the costs incurred in purchasing allowances to cover the balance between verified emissions and the level of free allowances allocated during EU ETS Phase III. This in itself should provide a strong incentive for decarbonisation rather than avoidance of CET achieved through activity reduction, although the consequences of reduced activity levels due to the COVID-19 pandemic should also be considered (see response to Question 1).

In moving to the CET, the level of incentive to decarbonise installations may be reduced by removal of the options available via a market-based ETS, where surplus allowances can be sold or transferred to a separately permitted installation operated by the same company or to a third party. At the same time, removal of the option to sell or transfer TEAs across companies within the same group, makes UK industry less competitive vs. EU ETS installations.

The current proposals for the CET also remove one of the key features of an ETS, where transfer of allowances encourages pursuit of the lowest-cost abatement options, in particular, where a number of permitted installations are (or can be) integrated. Removing the ability to transfer or offset tax emission allowances introduces a disincentive to progress lowest-cost abatement opportunities (such as heat transfer).

Removing the ability to offset CET liabilities across sub-installations or sub-groups is also inconsistent with other areas of UK taxation:

- From a corporate tax perspective, losses from one division can be used to offset gains in a separate division within the same company.
- Losses from one group company can be used to offset profits from a separate group company.

UKPIA strongly supports the principle of emissions abatement at lowest cost, which has underpinned a number of investments made across integrated sites under the EU ETS. Removal of the ability to transfer or offset tax emission allowances between sites will also undermine the business case for these investments - we believe that such ability should be an element of any UK CET.

Although UKPIA believes strongly that decarbonisation achieved by main scheme installations should be supported, this should be provided through other means than mechanisms linked to the CET. For large installations such as refineries, significant decarbonisation is likely to be achieved through implementation of specific projects such as:

- Fuel switching, including hydrogen production and recovery for internal or third-party use
- Recovery of waste heat for use internally or by third parties
- Energy efficiency improvements
- Feedstock substitution to produce low-carbon liquid fuels
- Carbon capture, utilisation and storage

All of these examples can require significant investment, typically upwards of £5m each. Although support for such projects is already available under the Industrial Strategy Challenge Fund (ISCF), Industrial Decarbonisation Challenge (IDC), Industrial Energy Transformation Fund (IETF) and Industrial Heat Recovery Support (IHRS) programme, this is allocated via a competitive process, with much of the funding scaled to support smaller projects. Instead of the mechanisms proposed in the Consultation Document for support linked to the CET, UKPIA would prefer to see enhanced capital allowances under corporation tax and/or increased levels of support under the existing schemes.

Q4. Do you agree that there should be no obligation on operators that did not wish to make a claim to submit this additional data? How easily could your installation provide this additional data? How much additional work would it take to calculate (please set out the employee hours and expected costs of doing this)?

Although UKPIA does not support design of the CET to facilitate payments to reward decarbonisation, if such a scheme were to be implemented, operators that did not wish to make a claim under the scheme should not be required to support the additional data. For complex installations such as refineries, it may also be difficult for operators to demonstrate genuine emissions reductions achieved through decarbonisation projects, compared to changes in the activity level across different refinery units or net reductions achieved through both mechanisms.

Similarly, installations where the TEA is derived using the heat and fuel benchmarks may be able to reduce their emissions through changes in the product mix, substituting lower carbon intensity products for existing products, whilst keeping the apparent activity level relatively the same.

Q5. Do you agree that the methodology outlined above would accurately demonstrate the extent to which an installation’s emissions reductions were achieved through decarbonisation?

See response to Question 4.

Q6. Do you agree with the government’s proposal to enable installations to submit data with activity level reports and to allow a final deadline of 31 March 2024 for claims relating to the 2021 and 2022 tax years?

Should payments for decarbonisation be introduced under the CET policy, UKPIA agrees with the proposal to enable installations to submit data with activity level reports and to allow a final deadline of 31 March 2024 for claims relating to the 2021 and 2022 tax years. However, this is subject to successful resolution of the issues raised in the response to Question 4.
Chapter 2: Rate in 2021 and 2022

Q7. Do you agree that the Carbon Emissions Tax rate should be set using EU ETS price data?

The proposal to set the indicative CET rate using the average December 2021 and 2022 EU ETS allowance futures prices, supplemented by an uplift to allow for higher average EU ETS auction clearing prices for 2021 and 2022 appears well-intentioned. However, for announcement in the Autumn Budget 2020 and Budget 2021 respectively, the indicative rates would need to be set based on the average December 2020 and 2021 allowance futures prices. With possible implementation of the CET from 1st January 2021, it is important that operators are provided with an indicative rate to allow budgeting before the start of the financial year, even though the actual rate and tax liability will not be known for 2021 until early 2022 and for 2022, early 2023.

It remains unclear how the CET would be calculated from the average EU ETS auction clearing prices – this should use a calculation weighted according to the number of allowances auctioned.

Although the proposals make clear the intention to ensure UK industry would not face a higher carbon price than EU competitors, the move away from a market-based ETS to a CET, removes flexibilities and provisions present under the EU ETS, including:

- The potential to hedge costs of compliance through trading or purchase of allowances when the market price is higher or lower.
- Removal of the option where surplus allowances can be sold or transferred to a separately permitted installation operated by companies within the same group.
- The potential for indirect cost compensation for eligible sectors under the provisions made under Directive 2003/87/EC (as amended) and the EU ETS State Aid Guidelines (which themselves are subject to revision for EU ETS Phase IV).

Inevitably, removal of these flexibilities and provisions with implementation of a CET, is likely to disadvantage UK operators against their EU competitors.

Q8. What are your views on the proposal to adjust the rate?

Again, the proposal to adjust the indicative CET rates for 2021 and 2022 to be in line with “average” EU ETS auction clearing prices in these two years is supported in an attempt to maintain competitiveness between installations remaining in the EU ETS and UK installations subject to the CET (see also response to Question 7).

Chapter 2: Paying the tax to HMRC

Q9. For the longer term, do you think other payment methods should be made available (e.g. a transfer involving the Business Tax Account)?

At paragraph 2.11 of the Consultation Document, it states that taxpayers will not need to register with HMRC and that HMRC will obtain data from the regulators. As the part of the company ultimately handling the payment of the tax bill may not be the same as the part of the company dealing with the regulator, and to avoid payment requests being mislaid, we would recommend that HMRC verify the address and contact details with the taxpayer in advance of the payment cycle.

UKPIA also note that under paragraph 2.74, it states that the deadline for payment of the tax is 30 days from the date the tax bill was issued. Given potential delays in getting the bill to the correct contact, delays within HMRC, the postal service or within the taxpayer
organisation, it may be simpler for taxpayers to be given an exact date to pay the CET (e.g. 31st October 2022 for the 2021 year). If the tax bill had not been received prior to the payment due date the taxpayer could follow up directly with HMRC.

Chapter 2: Conclusion

Q10. Do you have any views on the practicality of the proposals in Part B of chapter 2 that you cannot cover in responses to other questions?

UKPIA has no further views on the practicalities of the proposals in Part B of Chapter 2.

Q11. Are there any omissions or do you have any concerns or other suggestions about the operation of the tax?

See response to Question 3 regarding removal of the options available via a market-based ETS, where surplus allowances can be sold or transferred to a separately permitted installation to achieve emissions abatement at lowest cost.

Chapter 3: Broadening the scope of the tax: capturing additional emissions

Q12. Do you have any views on how, in the years after 2021, a Carbon Emissions Tax could drive decarbonisation in sectors beyond those that would be subject to the tax at introduction?

UKPIA supports a global and uniform cost of carbon across all sectors - including those sectors not currently within the scope of EU-ETS – based on technology-neutrality and a market-based approach, and without overlapping regulation.

While the variation in marginal decarbonisation costs across sectors might require differential sector pricing in order to support the required rate of progress in the short term, policy instruments should lead towards uniformity in the longer term and as sector abatement costs converge.

UKPIA therefore supports extension of the UK ETS to cover additional sectors and other greenhouse gases (GHG), where this is practicable and the best option to increase the quantity of CO₂ or other GHG emissions covered. In this regard, consideration should be given to the inclusion of hazardous and municipal waste incinerators – this would provide additional support for reduction and better use of waste streams in line with circular economy objectives.

Chapter 3: Incentivising negative emissions in the longer term

Q13. Do you agree that the government should explore the case for tax incentives to support negative emissions technologies?

The potential for use of tax incentives to support negative emissions technology should be explored, but not in isolation, as many forms of the technology will require a sound business case to support investment by industry, with any support provided by government also likely to require a robust business case and justification for use of public funds for this purpose against alternative options.
Q14. In designing any tax incentive, what issues should the government consider regarding negative emissions technologies?

The long-term potential for use of carbon capture, utilisation and storage (CCUS) in direct capture of atmospheric CO$_2$ (DACC$^4$), is recognised by UKPIA. Here there are clear potential synergies for co-location of hydrogen production using steam reforming for non-refinery use, DACC$^4$ (and BECCS) at refinery sites, with the refinery initially the anchor client at the heart of industrial clusters for CCUS infrastructure. All six UK refineries are included in clusters identified under the BEIS Industrial Strategy Clusters Mission$^5$.

The opportunities for negative carbon emissions technologies are many, for example, manufacture of CO$_2$-based chemical products, including polymers; concrete building materials; enhanced weathering; forestry techniques, including afforestation, reforestation, forest management, and wood products; land management via soil carbon sequestration techniques; and biochar$^6$. However, these technologies are unlikely to be used only for a single purpose or sector.

Achieving decarbonisation at the highest rate of progress and lowest societal cost requires technology neutrality. Targeting support for “negative emission technologies” runs the risk of reducing support for development and deployment of lower cost and shorter-term opportunities to provide earlier and more significant emissions reductions.

This emphasises the need for a collaborative, systems-based assessment of the whole economy to understand and better enable utilisation of captured carbon and therefore, how tax incentives could be provided for negative emissions technologies implemented at both installation and via collaboration across a number of companies at cluster level.

$^4$ This potential has been identified in the Climate Change Committee report “Net Zero: the UK’s Contribution to stopping global warming”, (2019) under the Speculative Options case (Chapter 3.1).

$^5$ BEIS. What is the Industrial Clusters mission? (2019).