24 February 2023

Via email: energyintensiveindustries@beis.gov.uk

Energy Intensive Industries Team
Department for Business and Trade
1 Victoria Street
London
SW1H 0ET

**Energy Intensive Industries Compensation Scheme – Net Zero Conditionality Questionnaire**

Dear Sirs,

UKPIA represents the eight main oil refining and marketing companies operating in the UK. The UKPIA member companies – bp, Essar, Esso Petroleum, Petrolinos, 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 energy\(^1\).

The six UK refineries are not currently eligible under the Energy Intensive Industries (EII) Compensation Scheme. Following publication of the Government response to the consultation on review of the EII Compensation Scheme for indirect UK ETS costs from electricity use on 29th April 2022, UKPIA met with BEIS officials on to question the decision not to include refining as an eligible sector. We continue to question the validity of the assessments performed and will revert shortly with proposals for simplification of the methodology and improvement in the data quality used in the assessments.

Although the Net Zero Conditionality Questionnaire appears targeted at businesses benefiting from the EII Compensation Scheme, UKPIA would like to offer responses to many of the questions posed in the Questionnaire – these are given in Attachment 1.

As advised in the UKPIA response to the BEIS consultation “Energy Intensive Industries – Review of the schemes to compensate energy intensive industries for indirect emissions costs in electricity prices”, in August 2021, 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.

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\(^1\) BEIS Digest of UK Energy Statistics (DUKES) 2022 Tables 3.2-3.4.
UKPIA analysis of the international business environment shows the UK is at a serious disadvantage compared to other countries where UKPIA member companies have competing opportunities for investment in decarbonisation and energy efficiency projects with a more attractive return on their investment. The UK has higher carbon costs than competitor countries, poorer incentives to develop low carbon technologies, and a policy environment that does not offer sufficient investor certainty.

Multi-billion pound announcements by the US (Inflation Reduction Act) and EU (Fit for 55 Package), as well as other countries’ individual plans, highlight the ambition of others to attract investment in decarbonisation at this crucial stage. The UK government must provide match these incentives free of the type of Net Zero conditionality outlined in the consultation response and questionnaire as an urgent priority to secure investment in the UK before investment funding available is allocated to projects outside the UK. Failure to do so would leave the UK at risk of falling further behind in delivery of growth opportunities for Net Zero technologies and progress towards Net Zero.

Yours faithfully,

Dr Andrew Roberts
Director – Downstream Policy

cc: Michael Duggan
    Simon Stoddart
    Emilio Marin
    Department of Energy Security and Net Zero
    Department of Energy Security and Net Zero
UKPIA Response to Energy Intensive Industries Compensation Scheme – Net Zero Conditionality Questionnaire

Q1. Name of business

UK Petroleum Industry Association (UKPIA)

Q2. Contact details for correspondence

Email address: andy.roberts@ukpi.a.com

Q3. Does your business have a decarbonisation or Net Zero plan in place?

UKPIA is the trade association representing the eight main oil refining and marketing companies operating in the UK. These companies include the six refinery operators – Essar Oil UK Ltd., Esso Petroleum Co. Ltd., Petrolneos Manufacturing Scotland Ltd., Phillips 66 Ltd., Prax Lindsey Oil Refinery Ltd. and Valero Energy UK Ltd.

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.

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.

Each of the refinery operators is understood to have developed decarbonisation or Net Zero plans, but these are commercially confidential and are not available in the public domain. Although some of the UKPIA member companies have published high-level information on the Net Zero aims and ambitions, for example, bp², ExxonMobil³, Phillips 66⁴ and Shell⁵, this is at a corporate level and includes little detail on how decarbonisation targets will be achieved. Detailed information on energy consumption, production and emissions and on potential decarbonisation, energy efficiency or Net Zero projects is likely to be commercially confidential and covered by UK, EU and US competition law constraints.

The majority of UKPIA member companies are subsidiaries of international companies quoted overseas. These overseas listings have their own strict requirements (in particular, the US Securities and Exchange Commission) concerning climate change reporting requirements and disclosure of information on future investment plans. These are likely also

² bp Sustainability Report 2021.
³ ExxonMobil press release, January 2022.
⁵ Achieving net-zero emissions, Shell.
to impose additional constraints on the type and timing of any information reported or included in decarbonisation or Net Zero plans available in the public domain.

Q4. Has your business implemented any voluntary schemes or been a signatory to standards to reduce your emissions? e.g. ISO 50001.

UKPIA does not hold information on member company accreditation against ISO 50001, but understand that a number of sites have environmental management systems that meet the requirements of this standard.

Q5. What mandatory Monitoring, Reporting and Verification (MRV) requirements is your business subject to? e.g. ETS, CCA.

All six refineries – Essar Stanlow, Esso Fawley, Petrolneos Grangemouth, Phillips 66 Humber, Prax Lindsey and Valero Pembroke - participate in the UK Emissions Trading Scheme (ETS) and are subject to the UK ETS MRV requirements.

Energy used by UK refineries is currently exempted from the Climate Change Levy under special provisions included under the Energy Products Directive, Council Directive 2003/96/EC and transposed into UK law via the Finance Act 2000⁶. Consequently, they are not covered by Climate Change Agreements (CCAs).

Q6. Does your sector have a decarbonisation plan in place that you support or are a signatory to?

The Department of Energy and Climate Change and the Department for Business, Innovation and Skills published an Industrial Decarbonisation and Energy Efficiency Roadmaps to 2050 for the refining sector in March 2015⁷. This was followed by publication of a Joint Industry – Government Industrial Decarbonisation and Energy Efficiency Roadmap Action Plan for the refining sector in October 2017⁸. Although these documents were used as references in the Net Zero Review⁹ in 2022, they are now obsolete.

The UKPIA report “Transition, Transformation, and Innovation - Our role in the Net-Zero Challenge”¹⁰ published in October 2020 is supported by UKPIA member companies and provides a more up-to-date perspective on the sector ambitions and role in delivering Net Zero, including the technologies under consideration, along with an illustrative pathway.

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⁷ DECC/BIS Industrial Decarbonisation and Energy Efficiency Roadmaps to 2050 – Oil Refining, March 2015.
Q7. Has your business applied for any Government support funds designed to improve or support the transition to a low carbon future (e.g. Industrial Energy Transformation Fund)? If yes, what were the results of this application?

A number of projects including refinery decarbonisation and energy efficiency projects have been supported by Government funding. Examples include:

**Industrial Strategy Challenge Fund**
- Hynet – hydrogen production and CCS (£33m)
- Humber Zero (£12.7m)
- South Wales Industrial Cluster (£20m)

**Industrial Energy Transformation Fund**
- Essar Stanlow hydrogen furnace (£7.2m)
- Phillips 66 Humber hydrogen-firing (£510k)
- Essar Stanlow hydrogen-fired CHP (£299k and £5.25m)
- Phillips 66 Humber – electric motor drives (£1.6m)

**Low Carbon Hydrogen Competition**
- Gigastack (Phase 1: £500k; Phase 2: £7.5m)
- Hynet (Phase 1: £498k; Phase 2: £7.48m)

Proposals for power, ICC and hydrogen projects to connect onto a Track-1 or reserve cluster were submitted to BEIS by member companies as part of the Phase-2 cluster sequencing process. A list of projects assessed by BEIS to have met the eligibility criteria was published subsequently in March 2022\(^\text{11}\) and includes three refinery-based projects:

- Humber Zero - Phillips 66 Humber Refinery
- Prax Lindsey Oil Refinery Carbon Capture Project
- Carbon Dioxide Capture Unit – Essar Oil UK

UKPIA believe the refinery projects will be key to delivery of the Government’s ambition to deliver “at least two low carbon CCUS clusters by the mid-2020s and a further two by 2030” with capture and storage of 20-30MtCO\(_2\)/year\(^\text{12}\).

Q8. Does your business work with third party organisations on reducing your business emissions?

The refining sector works closely with engineering consultancies on feasibility, front end engineering design (FEED) and detailed design projects. In addition, the Oil and Gas Climate Initiative (OGCI) has sponsored a number of projects – examples include development of the Net Zero Teesside hub\(^\text{13}\) and Prax Lindsey CCUS projects.

\(^{11}\) [Cluster sequencing Phase-2: shortlisted projects (power CCUS, hydrogen and ICC)], August 2022

\(^{12}\) [CCUS Investor Roadmap], BEIS, April 2022.

\(^{13}\) [Net Zero Teesside], OGCI.
Q9. What are the main barriers to your business in achieving emissions reduction and/or energy efficiency measures?

UKPIA analysis of the international business environment shows the UK is at a serious disadvantage compared to other countries where UKPIA member companies have competing opportunities for investment in decarbonisation and energy efficiency projects with a more attractive return on their investment. The UK has higher carbon costs than competitor countries, poorer incentives to develop low carbon technologies, and a policy environment that does not offer sufficient investor certainty.

Multi-billion pound announcements by the US (Inflation Reduction Act) and EU (Fit for 55 package), as well as other countries’ individual plans, highlight the ambition of others to attract investment in decarbonisation at this crucial stage. In such an environment, where countries are competing hard for limited investment, there will be major knock-on effects to the wider economy if the UK cannot secure investment:

- Falling further behind in delivery of growth opportunities for Net Zero technologies like Hydrogen, CCUS and Sustainable Aviation Fuel (SAF) production.
- ‘Offshoring’ of business and emissions – undermining Net Zero ambitions and the UK economy and relying on other countries to reduce emissions of the products we consume.
- Risking security of supply by additional reliance on imports which can be subject to geopolitical upheaval.

Although refinery 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 level\(^\text{14}\), to drive down energy costs and improve 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.

Q10. What additional support would you need from Government to remove those barriers and deliver on your objectives?

The UK refining sector has embarked on its transformation to deliver Net Zero – requiring significant investment – which in turn needs the right policy environment. UKPIA members have invested over £18.5 billion in the UK since 1999, an expenditure that has underpinned the UK’s energy security, sustained jobs and added value to the UK economy. Yet, maintaining and accelerating such investment means the UK needs to be a globally competitive place to invest.

The UK government must therefore provide the right incentives to attract investment in the development of the low carbon technologies needed for Net Zero:

- Carbon pricing policy that protects against carbon leakage (whereby the same emissions simply take place overseas) so UK manufacturers are not disadvantaged over higher-carbon imports as they invest significantly in reducing their emissions.

\(^\text{14}\) The six UK refineries all subscribe to the Solomon Associates benchmarking studies – see [https://www.solomoninsight.com/services/benchmarking/refining](https://www.solomoninsight.com/services/benchmarking/refining).
- Recognition and meaningful support for all decarbonisation technologies that can offer deployment at scale. In particular, the role of low carbon fuels should be acknowledged as vital for Net Zero and supported by incentivising fuels with the lowest carbon intensity in the Renewable Transport Fuel Obligation and potentially via differentiation of Fuel Duty.
- A stable policy and fiscal environment that makes the UK competitive internationally so that essential investment decisions can be made.

These incentives and policy certainty are an urgent priority to secure investment in the UK before investment funding available is allocated to projects outside the UK, leaving the UK falling further behind in delivery of growth opportunities for Net Zero technologies and progress towards Net Zero.

**Q11. What support could BEIS offer you in developing a Net Zero plan for your business?**

UKPIA has no response to this question – see response to Question 3.