

# Super-Inquiry Response

## BEIS Committee – Super Inquiry on Post-Pandemic Economic Growth

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, PetroIneos, 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. UKPIA also works with associate members – Certas Energy, CLH Pipeline Services, Dragon LNG, Local Fuels and National Grid - on issues of process and health and safety with these companies having significant interests in downstream oil and gas supply chains. The downstream oil sector directly employs around 130,000 employees and supports 300,000 jobs in total across the UK economy.

In 2019 the UKPIA Future Vision report was published and showed a long-term and positive role that the sector can play in the UK's low-carbon future: refineries can develop to be low-carbon manufacturing hubs that could play a key part in the development of clusters and technologies such as Carbon Capture, with the whole of the downstream sector having potential to deliver low-carbon liquid fuels, reducing their own emissions while delivering the flexibility to produce high quality, low-carbon products using existing infrastructure.

The sector has been severely affected by COVID-19 along with much of UK plc. Demand for aviation fuels is currently down by around 70%, and road fuels fell by as much as 83% at the height of the pandemic, when lockdown was in full force. It is vital that the restrictions on peoples' movements and the wider economy are removed when safe and as soon as practically possible. While restrictions do remain in place, the true impact they have had on the economy cannot be fully appreciated and this makes planning its recovery even more difficult.

UKPIA is grateful to the BEIS Committee for inviting submissions for the super inquiry considering the post-pandemic economic recovery. UKPIA has considered concepts and specific policy areas that would have both a near-term and long-term positive impact for the recovery of the downstream oil sector. With three distinct yet interlinked challenges in the form of: recovery from the pandemic; adjusting to changes following Brexit; and meeting Net-Zero, UK Government's actions need to ensure that they can provide both certainty and security to businesses now, while not being in conflict with the long-term goal to make the UK economy net-zero by 2050.

The suggestions outlined here will not be able to fully resolve any of the three challenges identified above, however, while both the changes that come with Brexit and recovery from COVID-19 each pose challenges, the long-term framework and policies that will be needed to meet decarbonisation at scale have changed little for our sector from those we identified in our publication "The UKPIA Future Vision"<sup>1</sup> last year.

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<sup>1</sup> <https://www.ukpia.com/media/2230/ukpia-vision-july-2019.pdf>

## Guiding principles for UK Government to prioritise in its recovery package:

- Provide clarity and consistency of an energy policy approach that gives companies and potential investors the confidence they need to invest in the UK.
- Focus on policies that incentivise a wide range of potential technologies that individually and in combination can be used to deliver decarbonisation goals.
- Make available targeted support for infrastructure investments that can be expected to have a long-term positive impact on the UK's economic growth and/or its carbon emissions.

The following suggestions are specific to the needs of the downstream oil sector in meeting the challenges of COVID-19, Brexit and decarbonisation and align with the guiding principles outlined above.

## Providing greater energy policy certainty for the recovery:

UKPIA notes that a number of European refining companies have announced investments in major emissions reduction projects since COVID-19 hit the global economy, for example, Repsol in Spain<sup>2</sup> and Neste in Finland<sup>3</sup>. These investments show that the global downstream sector is continuing to make significant investments in new lower carbon business ventures and both saw significant engagement from respective governments over a long period, which helped them proceed.

UK Government will need to create a competitive business environment that encourages international downstream oil companies to invest in the UK. Projects such as Hynet<sup>4</sup> and Gigastacks<sup>5</sup> that were announced earlier this year in the North West England and Humber regions. These are demonstrable examples of the UK downstream oil sector's commitment to clean growth. Further investment will only be possible with certainty for investors that their projects support government energy policy and can be expected to make an acceptable return on investment.

- The UK Government must deliver as much certainty as possible around the post-transition period legislative framework and business support mechanisms that will be available. A reaffirmation of current policies and those which are being reviewed would be of value, particularly following the 2019 UK general election.

UKPIA notes that some countries (e.g. Germany, Australia) as well as the European Commission have delivered hydrogen strategies in recent months. While there is no silver bullet in meeting the UK's decarbonisation goals, hydrogen could have a significant role to play. UKPIA would welcome greater clarity from government about expectations of the role that hydrogen – both green and blue

<sup>2</sup> Repsol press release can be found at [https://www.repsol.com/en/press-room/press-releases/2020/repsol-to-develop-two-major-emissions-reductions-projects-in-spain.cshtml?utm\\_campaign=descarbonizacion\\_202006\\_corp&utm\\_source=linkedin&utm\\_medium=social](https://www.repsol.com/en/press-room/press-releases/2020/repsol-to-develop-two-major-emissions-reductions-projects-in-spain.cshtml?utm_campaign=descarbonizacion_202006_corp&utm_source=linkedin&utm_medium=social)

<sup>3</sup> Neste press release can be found at <https://www.neste.com/releases-and-news/sustainability/neste-develops-new-solutions-decrease-use-crude-oil-and-increases-research-and-development-finland>

<sup>4</sup> More information can be found at <https://hynet.co.uk/>

<sup>5</sup> P66 press release can be found at <https://www.phillips66.com/newsroom/gigastack>

hydrogen – could play in future energy mix. In better defining the role that hydrogen could play in the Net-Zero economy, it will also be possible to better understand the potential demand (consumers and industrial) that would result, which will be vital for businesses to create viable business cases for investment.

- The UK Government should consider publication of a Hydrogen Strategy – alongside the planned Energy White Paper - to make clear to businesses its expectations for the future role(s) of hydrogen in the UK both for both production and consumption. Such a strategy might consider:
  - Clarity of the role that hydrogen is expected to play in the UK (examples may include: in grid gas supply, in industrial carbon capture, for transport).
  - Long term goals to help grow demand, supply and necessary infrastructure changes to deliver rapid growth in the hydrogen economy.Policy reforms that look to deliver stable demand (e.g. mandates) or capital support for industrial use of hydrogen that can help overcome the existing cost gaps between blue and green hydrogen and that of grey hydrogen.

## Focussing on policies that are technology neutral to deliver defined decarbonisation objectives

### Overall policies:

Given the pressure on the public purse as a result of measures to support the economy during the pandemic, future policy must ensure an efficient allocation of funds going forward. UKPIA believes policy is best aimed at defining end-goals/outcomes, such as the reduction of greenhouse gas emissions and encouraging all methods and technologies that can meet that outcome to compete. Rewarding technology solutions that prove they can achieve those outcomes rather than initially restricting some participants may enable a more efficient means to achieve the outcome sought.

- An approach focussed on allowing a broad range of different decarbonisation technologies to compete on an equal basis could deliver better long-term use of scarce resource (financial and in R&D) for decarbonisation and must be a consideration when government is assessing new policy proposals.

UK Government has already identified the outcome it expects to see on greenhouse gas emissions by putting into legislation its expectation for the UK to become Net-Zero by 2050. In order to align investment to achieve such objectives, and embedding technology neutrality in all future policies, UKPIA has identified a number of policy areas that could deliver on decarbonisation goals while also providing opportunity for economic growth:

### Road fuels sector:

High quality and widely agreed information on actual carbon emissions for transport is essential if the UK is to meet its Net-Zero objective. It is necessary, therefore, to have a way of assessing the lifecycle emissions of all vehicles that can facilitate the broad range of different decarbonisation technologies needed. UKPIA looks forward to seeing the results of the Low Carbon Vehicle

Partnership's work<sup>6</sup> on lifecycle assessments that will help identify transport pathways that could lead to effective decarbonisation. This founding block also could provide the cornerstone for a future a carbon pricing mechanism that extends beyond the existing traded sectors - and potentially to international supply chains - and that could deliver efficient and technology neutral decarbonisation for fuels both during their manufacture and end use.

- The Low Carbon Vehicle Partnership work on assessing life cycle carbon emissions of different vehicles should be completed as soon as is practicable and be strongly considered as part of the Department for Transport's 'Transport Decarbonisation Strategy'.

As well as facilitating a detailed understanding of lifecycle emissions, there is the potential to improve existing policy under the Renewable Transport Fuels Obligation (RTFO). The RTFO incentivises the development of advanced biofuels, but does so only for fuels that meet a very specific set of criteria. While the need for clear criteria is required (especially for sustainability and 'real' carbon savings), the current system could be more flexible, to encourage companies to develop more of the low-carbon liquids options available. The lifecycle approach could also provide a framework through which to target innovation funding based on lifecycle GHG savings.

- UK Government should incentivise further research and development into *all* low-carbon fuel technologies that could contribute to lower carbon emissions for existing ICE vehicles in the short term. This will use existing infrastructure and the existing car fleet to deliver lower-carbon fuels that make carbon savings now. There is also the opportunity to make the UK a low-carbon liquid fuels innovator with global export potential.

#### Aviation transport sector:

UK Government must consider how aviation transport can be decarbonised, with liquid fuels with high energy density likely to be needed in 2050 and beyond. Incentives to develop advanced aviation biofuels within the UK could deliver a more resilient economic recovery by simultaneously promoting UK economic activity while reducing our reliance on aviation fuel imports that have made up two thirds of supply in recent years<sup>7</sup>. There are a number of different technologies being developed that could offer low carbon liquids fuels with some early plants being developed in the UK already such as the Velocys site in Immingham.

The need to decarbonise aviation, as highlighted by the CCC's most recent parliamentary update recommending that government "Commit to a Net Zero goal for UK aviation as part of the forthcoming aviation consultation and strategy"<sup>9</sup> offers an opportunity for UK leadership in this developing area. Apart from enabling decarbonisation towards Net-Zero, it could also enhance the UK's global leadership role in the development and delivery of those technologies in the future. This could be delivered through a targeted research and innovation programme, fiscal incentives such as investment tax credits, or by leveraging in private investment such as through public-private partnerships.

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<sup>6</sup> More information can be found at <https://www.lowcvp.org.uk/projects/joint-working-projects/life-cycle-co2e-emissions-across-vehicle-segments-and-policy-integration.htm>

<sup>7</sup> DUKES data from BEIS; <https://www.gov.uk/government/statistics/petroleum-chapter-3-digest-of-united-kingdom-energy-statistics-dukes>

<sup>8</sup> For example Velocys in Immingham <https://www.velocys.com/projects/altalto/>

<sup>9</sup> <https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/>

- UK Government support for sustainable aviation fuels should focus on targeted R&D, or potential tax credits that incentivise deployment of new or at scale plants for sustainable aviation fuel manufacture. It is vital that regulation of new facilities be able to be suitably flexible to new processes.

#### Decarbonising Industry:

As UKPIA's Future Vision report shows, refineries can develop to be low-carbon manufacturing hubs and play a vital role in decarbonisation of industry across the UK, doing so by reducing their own emissions while delivering the flexibility to produce high quality, low-carbon products. As noted earlier in this response, UKPIA sees a role for low carbon liquid fuels but this needs policy support.

In all efforts by UK Government to reduce carbon emissions in the UK – it has been included as an objective in early Ministerial statements on the UK COVID-19 recovery – it is important to ensure that there are protections for UK industry. The UK industrial sector, in concert with government, must decarbonise whilst supporting new and existing UK supply chains to flourish at the same time. It is important that manufacturing is not simply 'offshored' to nations with less rigorous climate change standards.

Existing policies such as addressing the indirect costs of EU ETS are essential to stop carbon leakage. In sectors such as downstream oil - that operate on a truly international basis- competition from less-regulated economies and those without a carbon price means that carbon leakage is a real and immediate risk. While efforts do need to be made to 'green' the UK economy, it will be necessary to put at the front of such policies an effective means to retain a domestic supply chain and to fully account for the country's carbon footprint, not just in production but also the UK's consumption.

- UK Government's recovery policy should consider both carbon and other forms of industry 'leakage' and make sure that the UK remains and ideally improves as a place to invest by delivering a means to ensure the extra costs of producing under a strong environmental regulatory regime does not have the unintended consequence of disadvantaging UK business in a global context

Common to all decarbonisation at scale, is the need to make low-carbon options commercially viable, without the long-term need for subsidy or other direct incentive – this should also fit in with a long term need from government to reduce the government borrowing. As above, UKPIA believes that technology neutrality in energy policy is important to allow to multiple, competing technology pathways to emerge where one, some or all can contribute to the UK's low-carbon economy as determined by their success which emerges over time.

- Extension of carbon pricing mechanisms to non-traded sectors e.g. transport could decarbonise multiple parts of the economy simultaneously and efficiently, as well as create a growing market for low-carbon products, which is essential for competitiveness.

#### Infrastructure Investment

CCUS offers a technology pathway that could have major decarbonisation potential across many industrial sectors – this was clear in the BEIS Industrial Energy Efficiency and Decarbonisation Pathways project<sup>10</sup>. The UK downstream oil sector would be one such sector that could benefit from a further, stronger push on CCUS from government, with the Hynet project in the North West being a prime example of how refineries can be a part of future CCS investment with Essar Stanlow being part of the consortium.

The UK Government's announcement at the Budget (March 2020) of a new £800m CCS Infrastructure Fund<sup>11</sup> will boost short term growth where the two foreseen plants are delivered, and bringing it forward to deliver as soon as possible will be important in order to help encourage investment. This is welcome and we believe that to maximise the value for money to the taxpayer, the fund should be targeted at the areas that are furthest away from commercial deployment – such as incentivising industrial CCUS.

Securing private investment is contingent on confidence that the CCUS projects involved have a credible route to market. Whilst the £800m CCS infrastructure fund is welcome and appreciated, central to this is confidence that there will be CCUS Business Models in place to create an investable market for CCUS. BEIS is currently considering how to make such long term infrastructure investments profitable given the need for CCUS development at scale and Contracts for Difference and / or a Regulated Asset Base may be viable means to deliver support for CCUS transportation and storage. While such options may be effective, UKPIA views that any support mechanism must reward not just the cheapest carbon capture projects, but enable large uptake to reduce CO<sub>2</sub> emissions at scale.

While CCUS is a focus for the UK Government at present, infrastructure investment should not be restricted to a single genre of technology. Bearing in mind our own industrial processes, similar support to that being considered for CCUS could also support a range of other major (decarbonisation) projects e.g. cogeneration plants, production of hydrogen using electrolysis, or the use of recovered industrial waste heat.

- Confirming and implementing a clear mechanism (or a number of options) to incentivise uptake of CCUS and other major decarbonisation technologies of industry at scale is vital. Clarity needs to be provided on the CCUS Infrastructure Fund – with it preferably being focussed on lowering the costs of for industry.
- Methods to bring forward major infrastructure investment could include those set out in UKPIA's Future Vision publication (including capital lending and reduction of financial risk). It is essential that business models for CCUS transport and storage as well as wider industrial decarbonisation are delivered soon to secure investment.

A summary of all recommendations made in bullets throughout this response can be found on the final pages.

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<sup>10</sup> <https://www.gov.uk/government/publications/industrial-decarbonisation-and-energy-efficiency-roadmaps-to-2050>

<sup>11</sup> <https://commonslibrary.parliament.uk/research-briefings/cbp-8841/>

## UKPIA Public Policy Recommendations:

### Providing greater energy policy certainty for the recovery

- 1) The UK Government must deliver as much certainty as possible around the post-transition period legislative framework and business support mechanisms that will be available. A reaffirmation of current policies and those which are being reviewed would be of value, particularly following the General Election.
- 2) The UK Government should consider publication of a Hydrogen Strategy – alongside the planned Energy White Paper - to make clear to businesses its expectations for the future role(s) of hydrogen in the UK both in production and consumption. Such a strategy might consider:
  - Clarity of the role that hydrogen is expected to play in the UK (examples may include: in grid gas supply, in industrial carbon capture, for transport).
  - Long term goals to help grow demand, supply and necessary infrastructure changes to deliver rapid growth in the hydrogen economy.
  - Policy reforms that look to deliver stable demand (e.g. mandates) or capital support for industrial use of hydrogen that can help overcome the existing cost gaps between blue and green hydrogen and that of grey hydrogen.

### Focussing on policies that are technology neutral to deliver defined decarbonisation objectives

- 3) A technology neutral approach focussed on allowing all technologies to compete on an equal basis could deliver better long-term use of scarce resource (financial and in R&D) for decarbonisation and must be a consideration when government is assessing new policy proposals.
- 4) The Low Carbon Vehicle Partnership work on assessing life cycle carbon emissions of different vehicles should be completed as soon as is practicable and be strongly considered as part of the Department for Transport's 'Transport Decarbonisation Strategy'.
- 5) UK Government should incentivise further research and development into *all* low-carbon fuel technologies that could contribute to lower carbon emissions for existing ICE vehicles in the short term. This will lessen the pressure on new-build infrastructure to support mass rollout of EVs while making use of existing infrastructure and the existing car fleet to deliver lower-carbon fuels that make carbon savings now. There is also the opportunity to make the UK a low-carbon liquid fuels innovator with global export potential.
- 6) UK Government support for sustainable aviation fuels should focus on targeted R&D, or potential tax credits that incentivise deployment of new or at scale plants for sustainable aviation fuel manufacture. It is vital that regulation of new facilities be able to be suitably flexible to new processes.
- 7) The UK Government's recovery policy should consider both carbon and other forms of industry 'leakage' and make sure that the UK remains and ideally improves as a place to invest by delivering a means to ensure the extra costs of producing under a strong environmental regulatory regime do not disadvantage UK business.

- 8) Extension of carbon pricing mechanisms to non-traded sectors e.g. transport could decarbonise multiple parts of the economy simultaneously and efficiently, as well as create a growing market for low-carbon products, which is essential for competitiveness.

### Infrastructure Investment

- 9) Confirming and implementing a clear mechanism (or a number of options) to incentivise uptake of CCUS and other major decarbonisation technologies of industry at scale is vital. Clarity needs to be provided on the CCUS Infrastructure Fund – with it preferably being focussed on lowering the costs of for industry.
- 10) Methods to bring forward major infrastructure investment could include those set out in UKPIA's Future Vision publication (including capital lending and reduction of financial risk). It is essential that business models for CCUS transport and storage as well as wider industrial decarbonisation are delivered soon to secure investment.