

IOM3 response to Designing a Climate Compatibility Checkpoint for future oil and gas licensing on the UK Continental Shelf consultation, issued by BEIS December 2021

The Institute of Materials, Minerals and Mining (IOM3) is a charitable organisation incorporated by Royal Charter and is the professional body for the materials cycle from extraction, through characterisation and manufacture to use and end of life. Our more than 15 000 individual members work in a variety of sectors including packaging, polymers, ferrous and non-ferrous metals and mining/raw materials extraction and processing in a variety of roles from chief executive to student and from independent consultants to academics and practitioners. IOM3 has prepared a response on the following consultation from member input including the Energy Transition Group, Composites Group and the Sustainable Development Group.

Designing a climate compatibility checkpoint for future oil and gas licensing in the UK Continental Shelf, December 2021, Department for Business, Energy & Industrial Strategy (BEIS)

The Institute of Materials, Minerals and Mining (IOM3) response to this consultation is underpinned by the following:

The North Sea Transition Deal agreed between the UK Government and the offshore oil and gas industry, through the trade association Oil and Gas UK (OGUK), defines key outcomes that underpin the UK transition to net zero. IOM3 believes that it is therefore appropriate to use the commitments in the North Sea Transition Deal as the basis against which to assess delivery in the checkpoint.

Climate change is a global issue and the location of greenhouse gas (GHG) emissions is irrelevant. Therefore, replacing domestic production of anything, including oil and gas, with imports that have a greater carbon intensity will accelerate climate change. IOM3 therefore considers that providing the emissions associated with domestic production of oil and gas are equal to, or lower than, the emissions associated with importing oil and gas then domestic production should take precedence. Likewise, where the emissions associated with exported UK oil and gas are equal to, or lower than, alternatives sources then the UK should export.

IOM3 has based its responses to the consultation on the most accurate data available as set out in the Digest of UK Energy Statistics (DUKES) 2021 from the Department of Business, Energy & Industrial Strategy.

Principles of the Checkpoint

Question 1: Are these the right principles? Are there others that should be included? (i.e.: Evidence based, Transparent, Simple).

Yes. The Checkpoint must be evidence based to avoid ambiguity about the data. Transparency is important to a democratic society (i.e. clear to those who are interested in the detail of the Checkpoint, such as journalists, politicians, scientists, engineers, NGOs, interested persons). Keeping the approach simple (so far as is reasonably practicable) will make it more likely the wider society will become aware and informed.

Checkpoint Tests

Question 2: Are there other things that the checkpoint could take into consideration? If yes, please provide proposals for how these could be considered objectively, as well as data sources that could be used to support the inclusion of such a consideration (the more information that is provided here the better).

No response submitted

Potential test 1: Reductions in operational greenhouse gas emissions from the sector vs. commitments

Question 3: Should this test be part of the checkpoint as described? If no, please describe how it should be adapted to make it suitable.

This test should be part of the checkpoint as described as it reflects the targets included within the North Sea Transition Deal that align with the overall UK target of a 78% reduction in emissions by 2035.

Question 4: What kind of grace margin should be included?

No response submitted

Potential test 2: Reductions in operational greenhouse gas emissions from the sector benchmarked internationally

Question 5: Should this test be part of the checkpoint as described? If no, please describe how it should be adapted to make it suitable.

Yes, this test should be part of the checkpoint: climate change is a global issue, replacing UK domestic production with imports that have higher greenhouse gas emissions will have a negative impact on climate change.

Question 6: What data sources could be used in the application of such a test?

Data sources that conform to a recognised methodology, for example IPIECA, should be used.

Question 7: Do you agree with the proposal for benchmarking oil and gas separately, and in slightly different ways as described?

IOM3 agrees with the proposal to benchmark oil and gas separately.

Data from DUKES 4.5 shows that gas imports to the UK through pipelines have been decreasing year on year in favour of LNG. This may indicate that if new licences to explore for and develop domestic gas are withheld it is likely that demand will be met with imported LNG. However, over a third still comes via pipelines. We therefore propose that UK emissions are benchmarked against the average emissions (including transportation, liquification and production, including the emissions from hydraulic fracturing where appropriate) from the main suppliers to the UK such that >90% of the gas supplied is covered.

DUKES 3.9 shows the countries supplying oil to the UK. In line with the methodology proposed for gas we propose that the UK is benchmarked against the average emissions for >90% of oil imports. From DUKES 3.9 the most recent data shows that the following countries supplied 93% of UK oil imports: Norway, Russian Federation, Nigeria, USA, Algeria and Canada. We propose that initially the emissions, including shipping, for oil imported from these 6 countries should be used for the benchmark.

Question 8: Do you have a specific suggestion for which countries the UK sector should be benchmarked against for oil and gas respectively?

IOM3 proposes that the countries the UK should be benchmarked against should be weighted by the relative proportions supplied by each country .

Question 9: What position should the UK achieve relative to other countries' benchmarks in order for this test to be passed (e.g. above average, top quartile)?

The UK should be able to demonstrate emissions, as a minimum, that are equal to, or lower than, the emissions associated with imported oil and gas, including the emissions associated with shipping, liquification (in the case of LNG) and hydraulic fracturing where appropriate e.g. US shale gas and shale oil.

Potential test 3: Status of the UK as a net importer or exporter of oil and gas

Question 10: Should this test be part of the checkpoint as described? If no, please describe how it should be adapted to make it suitable.

Yes. With the UK expected to remain a net importer of oil and gas, and until alternative energies make up the difference, reliance on overseas sourced oil and gas puts the UK at economic and social risk which must be minimized as far as reasonably practicable. .

Question 11: If the UK were to become a net exporter of oil & gas in the future for any reason, would this present a problem? If so, why?

Yes. The commercial imperative to export oil and gas, to ease the balance of trade deficit, p has a potential risk to delay the energy transition and risks the UK becoming more reliant on overseas energy and technologies. Short term gain will result in long term significant commercial and economic disadvantage, with the potential for social unrest.

Question 12: Do you have views on the forward time period that should be used when projecting whether the UK could become a net exporter of either oil or gas?

The Figure 1 and 2 projections show the UK is currently a net importer, and unlikely to become a net exporter, in the foreseeable future. . Extrapolating beyond this it is unreasonable to expect the analyses to be accurate, and the UK should make all efforts to achieve the energy transition and reduce emissions as soon as possible.

Question 13: Do you have any views on whether it would be permissible for the UK to remain a net exporter of oil, while being a net importer of gas?

Given the issue with predicting the reservoir fluid at licensing and the resultant rejection of separate oil and gas licensing, if the UK became a net exporter of oil and a

The global network for the materials cycle

net importer of gas then this test would need to take account of the relative position of oil production emissions in the UK compared to global production and a positive result would depend on that. In order to minimize GHG production due to transportation of crude oil overseas as much UK crude oil as reasonably practicable should be refined and used in the UK. Crude oil can be cracked to smaller molecules which can be used for heating and electricity energy generation, however, this is likely to require significant investment in UK refineries to reconfigure them for predominantly UK consumption. Some crude oil may still have to be exported to feed overseas refineries requiring a balanced feedstock, however transport miles should be limited by agreement with the industry (e.g. to Europe only).

Potential test 4: Sector progress in supporting Energy Transition technologies

Question 14: Should this test be part of the checkpoint as described? If no please describe how it should be adapted to make it suitable.

It is appropriate to compare the industry's progress in the development of energy transition technologies with the commitments set out in the North Sea Transition Deal. CCUS and hydrogen are two of the five outcomes listed in the North Sea Transition Deal along with: supply decarbonisation, supply chain transformation and people and skills. As stated in the Deal the five key outcomes are each closely interlinked and it is recognised that there are a wide range of uncertainties that may impact on delivery, this is particularly relevant to the development of new technologies. It will be difficult to deliver energy transition technologies, such as CCUS and hydrogen, without delivering on people & skills for example. Recognising the uncertainties, the interlinked nature of the outcomes in the North Sea Transition Deal and the need for both Industry and Government to deliver, it is proposed that test 4 should be adapted to test sector progress against the whole North Sea Transition Deal.

Question 15: Do you have any specific suggestions on how progress could be measured?

The North Sea Transition Deal incorporates a governance mechanism that addresses progress. This mechanism should be used to measure progress.

Question 16: Are there any other targets or pathways for Energy Transition technologies that could be used?

Adapting the Test to cover delivery against the whole North Sea Transition Deal, as proposed, would address this question.

Question 17: Would this be a fair test, given that the delivery of the above targets is only within the control of a small number of operators?

Adapting the Test to cover delivery against the whole North Sea Transition Deal, as proposed, would make it fair.

Potential test 5: Consideration of international Scope 3 emissions

(Scope 3, Other indirect, emissions are emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classified as Scope 2 emissions, e.g. end-use emissions when hydrocarbon are combusted, or used in other processes, e.g. production of plastics or medicines)

Question 18: How can Scope 3 emissions be measured and monitored in a comparable way?

Scope 3 emissions of UK produced oil and gas, can be measured by either (i) requiring hydrocarbon traders, and/or (ii) requiring companies using oil and gas feedstock, to annually report sale and consumptions of these UK produced hydrocarbons. Monitoring may be performed by matching sales with purchases. CO₂ emissions from hydrocarbon combustion can be calculated by estimating whether the refined product is petrol, diesel, avgas, or cracked further to smaller molecules. CO₂ emissions from using hydrocarbons as plastic and medicines feedstock can be estimated from existing data on energy consumption associated with their production.

Question 19: How would a test that takes into account Scope 3 emissions be designed? Please detail your proposed methodology and state sources of data and projections that would be required.

The UK has a plan to achieve net zero with the oil and gas industry contribution to achieving this plan detailed in the North Sea Transition Deal. The award of new offshore UK oil and gas licences should be conditional on delivery of the North Sea Transition Deal as detailed in the responses to this consultation.

Potential test 6: Consideration of the 'global production gap'

Question 20: How would a test that considers the world's "production gap" be designed? Please detail your proposed methodology and state sources of data and projections that would be required.

Test 6 should not be included in the climate compatibility checkpoint. The consultation document itself notes that applying this test would lead to increased UK imports of oil and gas over time. Given the higher carbon intensity of imports compared to domestic

production, this would lead to higher net global emissions and would therefore act contrary to the UK and global commitment to achieve Net Zero.

Implementation of the Checkpoint

Question 21: Do you have views on whether it would be advantageous to put the checkpoint on a statutory footing if such an opportunity arose in future?

As stated in the North Sea Transition Deal the pace of the energy transition should be managed to balance the need to decarbonise with the need to maintain energy security and affordability. The Deal also recognises the wide range of uncertainties that exist. Recognising that the checkpoint is a new, untested, check it would not be appropriate to put the checkpoint on a statutory footing at this point in time given the importance and uncertainties around the energy transition. The existing expectation on the OGA to consult with HM Government and thus to take the checkpoint into consideration is therefore appropriate for now.

Question 22: Do you have views on how long the outcome of a checkpoint should be considered valid for?

The checkpoint tests assess delivery against multiyear objectives using some key data, such as DUKES, that are published annually. Oil and gas companies can choose which countries to invest in: the UK will want to attract and retain investment from companies that align with the UK values and objectives. Oil and gas developments require significant upfront capital investment to find and develop oil and gas before returns are made. Creating the confidence for the right businesses to invest in the UK is key and therefore it would be appropriate for the checkpoint to remain valid for 3-5 years.

Question 23: Should the checkpoint outcome apply to potential future onshore licensing rounds within England?

A number of the checkpoint tests use the North Sea Transition Deal as the basis for comparison. This Deal was signed between OGUK and the UK Government. OGUK does not represent the UK Onshore Operators who have their own Industry body, the UK Onshore Operators Group, UKOOG which predates OGUK. Any checkpoint for onshore oil and gas licences should be based on energy transition deliverables agreed between the Government and UKOOG. Such a checkpoint could be structured in the same way as this proposed checkpoint but with a specific set of underpinning targets. The interaction between the two checkpoints also be considered, but the current proposed offshore checkpoint should not be applied unchanged to onshore licences.

'Out of Round' Licence Awards

Question 24: Do you agree that "out of round" should be subject to the existing regulatory process and effective net zero test, rather than the climate compatibility checkpoint?

IOM3 agrees that "out of round" should be subject to the existing regulatory process and effective net zero test, rather than the climate compatibility checkpoint for the reasons stated in the consultation.