# **DBEIS Consultation:**

# Designing a climate compatibility checkpoint for future oil and gas licensing in the UK Continental Shelf

Response from the <u>Aberdeen University Centre for Energy Law</u> (Roy Partain, John Paterson, Daria Shapovalova)

# **Consultation questions**

# **Principles of the Checkpoint**

Question 1: Are these the right principles? Are there others that should be included?

#### **Answer:**

The approach to define and apply principles is welcome but requires further elaboration.

1) With regard to the 'evidence-based' principle, two requirements should be recognised. First, the data should be presented at the same level of rigor and transparency as to enable third parties to replicate and examine the accuracy of said data, with auditable reproducibility of results/outcomes as the goal. This approach will also support the second goal of 'transparency'. Second, potential licensees should be required to provide their data alongside data from other institutional reports. The IPCC reports, as well the

UNEP's Annual Global Production Gap Report, and the IEA's 'Net Zero by 2050' report should be taken into comparative account alongside any data presented by the project proponents.

- 2) Transparency should be complete, it should list the actors involved in creating those data sets, their sources of financing those efforts, and information as to other comparable data sets or prior efforts to obtain such data. The regulator should not bear the costs of finding other data sets that might confirm or challenge the presented data, nor should the regulator have to bear the initial costs of identifying potential conflicts. Transparency should also reveal the methods and technologies used to obtain or create the data set.
- 3) Simplicity is not per se a principle if the creation of simplicity hides or ignores important and necessary information. The costs of storage are minimal in the modern age and the feasibility of distributing such information is very affordable. Rather than simplicity, a focus should be on accessibility, legibility, and machine readability to enable modern methods of publication and analysis.
- 4) The legal principle of producing and providing an Environmental Impact Analysis should be recognised in this process. This is a fact of UK law, previously accepted EU law, incorporated into multiple international conventions, and is generally recognized as a function of customary public international law. As part of that effort, carbon and other greenhouse gases should be examined in relation to the life span of the potential license activity. The recent decisions in *Greenpeace Limited v The Advocate General [2021] CSIH 53* as well as *R* (Finch) v Surrey County Council [2021] PTSR 116 suggest exclusion of downstream (Scope 3) emissions from the scope of impact assessment. BEIS should address this issue in more detail and with more rigour and provide compelling reasons for such exclusion.
- 5) The precautionary principle must be applied. In particular, the Explanatory Note to the sec. 17 of the Environment Act 2021 explains that

"the precautionary principle so far as relating to the environment: where there are threats of serious irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. This applies

to issues regarding the natural environment and includes where human changes to the natural environment impacts upon human health, such as air quality."

Thus, the lack of certainty on the fate of the developed oil and gas resources, or the greenhouse gas emissions associated with their production, transport, and utilisation (Scope 3 emissions), should not be used as a justification to disregard the climate effects of these actions. Care must thus be taken to ensure that the principle of precaution is not implemented inappropriately as either the principle of inaction or the principle of insufficient reason.

## **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). You may wish to read the rest of the document before answering this question.

#### Answer:

We suggest the following additional potential tests:

- 1) How does the potential license activity enable greenhouse reductions by reducing needs for other carbonaceous energy sources within the UK; ie, how does approving this project prevent the need for future approvals or renewals of other greenhouse gas releasing energy projects?
- 2) How has the licensee accounted for carbon and greenhouse gas emissions from the project; have they provided sufficient offsets to carbon budget to minimize the impact of the project?
- 3) Has the licensee provided financial reserves so that the UK or others on its behalf can undertake projects to address the impacts of carbon emissions and greenhouse gases should the checkpoint test prove invalid under later operational conditions?
- 4) Has the licensee provided engineering designs and plans that would enable the UK or others on its behalf to safely and securely shut down operations of the facility should the checkpoint test prove invalid under later operational conditions?

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.

#### **Answer:**

This test should be applied as an integral part of the checkpoint. In addition, the existing targets need to be re-evaluated in line with the current scientific advice.

The industry decarbonisation requirements in the North Sea Transition Deal are regarded as the "absolute minimum the OGA expects from industry". The Committee on Climate Change in its 2021 Report to Parliament stated that:

"Electrification and reduced methane flaring and venting in oil and gas production is limited.

There will need to be a rapid ramp up to achieve the required 68% emissions reductions from oil and gas production by 2030 underlying the path to the Sixth Carbon Budget."

It is not clear "government support" would be required for the achievement of the targets as outlined in the 'Cons' section of this test.

There is no risk to an entrepreneur in not approving a license; this is doubly so when the licensed activity would provide or cause harm to the community or nation. The denial of a license is merely a direction that the entrepreneur has not proven that they can take on the risks to the community and nation at sufficient safety levels, vis-a-vis climate change risks in this case. It is also a signal to find other worthwhile investments. Thus, the proper role of this test is both to safeguard investors in UK energy projects and to safeguard the community and nation from unnecessary and unreasonable risks from climate change.

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

#### **Answer:**

Oil and gas operators routinely design and operate engineering plans to accommodate a wide array of operational hazards, inclusive of risks from oil and gas operations, from North Seas weather and storms hazards, and to various health and safety hazards to humans. The grace margin for those planning items has long been litigated and addressed by a variety of

institutional processes.

There is nothing presented in this document or in the broader discussions that suggest why the norms of safety for those activities should be any different than risks from carbon emissions and greenhouse gas emissions

# 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.

#### **Answer:**

No.

A global average would include many sources of crude oil or natural gas that operate with very different legal rules and institutions and operate at norms far below the standards expected within the EU and within the UK.

It would be more appropriate to use an average from a more limited set of nations that do set similar regulatory goals as the UK.

Even better would be to simply set a standard, per UK specific goals, and measure against that agreed to standard. In particular, the UK could explicitly set out to be "best-in-class", thus stimulating technological innovation and making best use of the skills, expertise and experience of the workforce.

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

#### Answer:

See above.

The UK, the EU, and the USA could all provide reliable data sets that would be from legal regimes with similar norms. This would be the appropriate set of comparators. Yet, one wonders why we would set our goals against lower standards? As mentioned above, there is an opportunity for the UK to position itself to be a global leader in this regard.

Question 7: Do you agree with the proposal for benchmarking oil and gas separately, and in

slightly different ways as described?

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

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)?

# 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.

#### **Answer:**

It is not clear why this test is part of the checkpoint at all.

According to the CCC figures above, the UK is set to remain a net importer of both oil and gas for the foreseeable future. It appears that this checkpoint test would not be a difficult one to meet. Reduction in domestic demand must remain the main means of reducing import-dependency.

If the DBEIS is set to connect the granting of licenses to the UK's importer/exporter status, then it would be logical to more seriously consider the Production Gap Report (more comments below). This test might also require consideration of where the oil and gas are being imported from and what emissions are associated with its production and transportation.

Despite the acknowledgment of the net status, this checkpoint test might create an impression that domestic production ends up in a domestic supply and minimises the effects of the global nature of the oil and gas markets. A large share of currently produced oil and gas is exported currently despite the net importer status. In 2020, 39 million tonnes of oil <a href="weepwere-exported">were exported</a> mainly to the Netherlands, Korea, Germany, and China, some of which is imported back to the UK as refined petroleum products. In the same year, around the same amount was imported, mostly crude from Norway and the US.

This looks more like a 'wave-through' than a serious checkpoint test.

Question 11: If the UK were to become a net exporter of oil and gas in the future for any

reason, would this present a problem? If so, why?

#### Answer:

Notionally, licensees in the UK might be more responsible producers of crude oil or natural gas than operators in other jurisdictions with looser or non-existent climate change policies on hydrocarbon extraction activities. In this odd light, it might be preferable that if the world continues to engage in crude oil and natural gas markets, that countries such as the UK take a lead in ensuring that such production is done at the minimal potential impact to climate change risks.

In such a logic, it might be preferential for the UK to be a net exporter.

However, despite these arguments being used repeatedly, including in the Parliamentary debates, no concrete data supporting such statements has been presented by its proponents.

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?

#### Answer:

The science of predicting energy markets is notoriously inaccurate in predictions exceeding five years; i.e. the timeframe for known and foreseeable investment decisions. Forecasting beyond that point has long proven erroneous and worthless of time invested.

One wishes for a longer-term outlook, but the modeling capacity is not legitimately capable of providing such insights.

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

#### Answer:

The existence of this question suggests that the complex issues of world trade law could be swept aside; there is no evidence for that assumption.

# 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.

#### **Answer:**

Yes, it should.

Even though we are speaking of hydrocarbon extraction activities, those activities can themselves be powered by renewable energy sources and thus reduce non-necessary carbon emissions from using crude or gas to power their own extraction, processing, or transportation.

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

#### **Answer:**

It should be measured in multiple metrics, as the issues are not fully fungible and interchangeable.

- Capital allocation as a percentage of project capital
- Joule/kWh or other energy measure as a percentage of operational energy budgets
- Enumerated listing of renewable energy devices.

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

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?

#### **Answer:**

Absolutely, many jurisdictions require the use of renewable energy systems in the upstream to minimise loss of hydrocarbon products, to maximise volumes sold.

## Potential test 5: Consideration of international Scope 3 emissions

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

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.

## 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.

#### **Answer:**

It is unhelpful that the description is phrased in the way that puts under question whether the DBEIS is seriously considering this test or whether this is a token inclusion.

The IPCC has estimated that to have a 32-56% chance of meeting the 2°C goal, the carbon budget for 2011-2050 should not exceed 870-1240 gigatonnes of CO2. The estimated amount of fossil fuel resources contains CO<sub>2</sub> considerably exceeding this budget tenfold. To meet the target of keeping global warming below 2°C, a third of oil, half of gas reserves, and over 80% of coal reserves should remain unused from 2010 to 2050, which prompts the question of which resources will need to stay in the ground, creating a challenge for energy and climate justice and the climate change and energy regulation. Building on this research, the 2020 Production Gap report estimated that to follow the 1.5°C-consistent pathway, 'the world will need to decrease fossil fuel production by roughly 6% per year between 2020 and 2030'. In 2021, the International Energy Agency estimated that in the net-zero emissions scenario there is no need for fossil fuel exploration, new oil and natural gas fields beyond those already been approved for development, or new coal mines or mine extensions.

While the immediate cessation of all activities might undermine the managed energy transition the lack of any timeline for phase out of production is contributing to the same outcome. The

UK's 2050 net zero emissions target is <u>supported</u> by carbon budgets, reporting, careful planning, and an independent Climate Change Committee. A similar approach should be taken for the production phase-out.

The argument on whether these measures would impact the other producers is irrelevant to this consideration. The UK's greenhouse gas emissions reduction ambitions are not conditional on the level of emissions in other countries so why should ambition in production phase out be? The so-called market substitution assumption claims that if petroleum is not produced in the UK, it will come from elsewhere, making no difference to global emissions. This argument was used multiple times by regulators and courts e.g. in the <u>US</u> and Norway to justify continued production.

There are a number of factual, economic, and ethical arguments against the market substitution assumption. Supporters of it are correct in saying that the type of resource that would substitute the proposed development has a direct effect on the level of potential climate benefits from abandoning a given fossil-fuel project. However, it should not be assumed that undeveloped oil would be substituted by coal or like-oil. Supply of fossil fuels has a long-term impact on demand through price formation and availability, especially in the presence of alternative energy sources. The market substitution assumption allows for deflection of responsibility for emissions by way of oversimplification of the supply-demand interactions in the global energy market. For an argument with such potential legal and policy strength, the burden of proof that its proponents carry does not seem to be very high.

In addition to the Production Gap Reports, please also see:

- 1) McGlade C and Ekins P, 'The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2 °C,' 517 Nature 187 (2015).
- 2) Welsby D, Price J, Pye S, Ekins P. Unextractable fossil fuels in a 1.5 °C world. Nature (2021)
- 3) Davis SJ, Peters GP, Caldeira K, 'The Supply Chain of CO2 Emissions', 108(45) PNAS 18554 (2011)
- 4) Erickson P and Michael Lazarus M, 'Accounting for Greenhouse Gas Emissions Associated with the Supply of Fossil Fuels' (Stockholm Environment Institute, 2013), <a href="https://www.sei.org/publications/accounting-for-greenhouse-gas-emissions-associatedwith-the-supply-of-fossil-fuels/">https://www.sei.org/publications/accounting-for-greenhouse-gas-emissions-associatedwith-the-supply-of-fossil-fuels/</a>;
- 5) Steininger KW et al., 'Multiple Carbon Accounting to Support Just and Effective Climate Policies,' 6(1) Nature Climate Change 35 (2016).

# 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?

#### **Answer:**

Yes, it should be put on statutory footing.

These new measures are likely to be challenged by potential licensees, especially when they are turned down due to failing such a test. So, enacting these measures in legislation would both signal their serious nature and provide courts with greater clarity on how to handle the cases presented.

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

#### **Answer:**

Technology and science are emerging rapidly in this sector, both with regard to offshore oil and gas operations and with regard to climate change concerns. In that light, the validity of outcomes should not be too long a time frame.

No longer than a decade, at a maximum.

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

#### Answer:

Absolutely yes.

The fundamental issues are carbon and greenhouse gas emissions and not the nature of the ocean environment itself, so the issues exist identically for onshore hydrocarbon extraction activities.

#### '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?

# **Answer:**

There are clearly practical reasons for adopting this approach. It would be desirable, however, to ensure that out-of-round licensing decisions are taken "having regard" to the outcome of the most recent checkpoint and that the regulator gives reasons for decisions with explicit reference thereto.

This consultation is available from: <a href="https://www.gov.uk/government/consultations/designing-a-climate-compatibility-checkpoint-for-future-oil-and-gas-licensing-in-the-uk-continental-shelf">www.gov.uk/government/consultations/designing-a-climate-compatibility-checkpoint-for-future-oil-and-gas-licensing-in-the-uk-continental-shelf</a>
If you need a version of this document in a more accessible format, please email <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a> . Please tell us what format you need. It will help us if you say what assistive technology you use.