Cover note for submission to **"Designing a climate compatibility checkpoint for future oil and gas licensing in the UK Continental Shelf"**

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This cover note reflects how the attached policy brief, prepared by UCL, addresses the following questions from the Climate Compatibility Checkpoint consultation document.

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?

Question 20: How would a test that considers the world's "production gap" be designed?

Firstly, we think it is key to acknowledge that climate change is the result of global cumulative CO_2 emissions and so it is imperative that Scope 3 emissions from oil and gas (O&G) that is extracted in the UK and then exported must be accounted for when determining the future of the country's O&G activities. On average, globally, Scope 3 emissions are estimated to account for 88% of the lifecycle emissions of the oil and gas sector[1]. Currently the UK is one of a small number of nations with a legally binding national decarbonisation objective, including our own domestic carbon budgets. Scope 3 emissions from exported fossil fuels slip through the net formed by these policies but still contribute to climate change when used elsewhere, especially in countries that consume fossil fuels but do not have their own legally binding domestic decarbonisation targets.

While a UK level methodology to account for the Scope 3 emissions from exported O&G could be devised, if its objectives were to align the UK's domestic O&G production with global climate ambition, which is surely the goal of the climate compatibility checkpoint, then a global analysis is required. It would be the only way to give the proper global context to UK production. As set out in the policy brief that we attach (entitled "UK oil and gas policy in a 1.5°C world"), this is a context where there is a global carbon budget and as a result a global "pot" of fossil fuels that can be extracted for a given climate ambition.

In the attached brief we have used a global techno-economic energy systems model, TIAM-UCL, to determine the optimal UK share of the global O&G pot in a 1.5°C compatible world. This accounts for Scope 1, 2 and 3 emissions from the global energy system, with the UK system embedded within it, and the global distribution of O&G production is determined based on cost and emissions intensity. From this analysis **we conclude that new oil and gas fields in the UK would be incompatible with the Paris Agreement.** The analysis is therefore aligned with recent findings from the IEA, which explored a pathway to net zero CO_2 emissions globally by 2050, and found no new oil and gas fields are required[2]. This finding is further strengthened by uncertainties around the timely deployment of

[1] IHS Markit, 2021. https://cleanenergynews.ihsmarkit.com/research-analysis/oil-gas-companies-under-pressure-to-manage-scope-3-emissions-t.html
[2] IEA, 2021. https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

negative emission technologies and the fact that we likely present an underestimate of the rates of decline of production required because we model only a 50% chance of limiting warming to 1.5C.

We therefore propose the UK should transition to a zero carbon economy while only extracting O&G from existing producing fields. Otherwise, to truly align new fossil fuel production in the UK with global climate targets, the climate compatibility checkpoint would need to explicitly identify which projects elsewhere in the world would not produce. This places a high burden of proof that would have to be met prior to giving new UK projects the green light. Continuing to license new UK O&G fields would contribute to growing the production gap identified by the UN's Production Gap report series[3] and set a risky precedent for other fossil fuel producing nations.

We argue that such an analytically grounded assessment and commitment to no new fields would be a strong message to the rest of the world with regard to how committed the UK is to ambitious climate action. A slower decline in UK O&G production, i.e. one that includes new fields coming online, would neglect the principles of a just transition, which would mandate that wealthy, diversified economies, like the UK, should lead as they are most capable of bearing the transitional impacts. Finally, a just transition would also mean a rapid, but managed, decline of the UK's domestic O&G sector, where jobs are supported to move to new low carbon opportunities.

[3] UNEP, 2021. https://www.unep.org/resources/report/production-gap-report-2021