Jackdaw gas field D/4260/2021

1. Please accept this as a response to the public consultation on Jackdaw Field Development, OPRED reference D/4260/2021, authored by Cedric Knight on behalf of community group Wanstead Climate Action.
2. The Shell/Adura document 'Jackdaw Field Development: Further Information required under DESNZ Regulation 12(1) Notices dated 21st July and 22nd September 2025: Part 1: Scope 3 Emissions Assessment'[1] does not provide sufficient context or information to evaluate environmental effects of Scope 3 greenhouse gas (GHG) emissions.
   2.a. Similar to the responses in relation to Rosebank oil field, also now operated by Adura, this failure may be owing to inexperience with requirements as interpreted in the Finch judgement and guidance; or an attempt to avoid considering the requirements; or to avoid having them them considered by the Secretary of State.
   2.b. The DESNZ notice dated 21 July 2025 required an 'assessment of the *effects* of downstream scope 3 emissions' and secondly a 'revised and updated assessment of the likely significant effects of the project on the environment that is *not limited to* downstream scope 3 emissions' (emphases added). An assessment of the environmental effects of scope 3 emissions was required, but appears in neither the 'Part 1' document, nor in the 'Part 2: Updated Assessment of the Project' which is really a list of changes to the Feb 2022 ES that does not include the change to include Scope 3. The first sentence of Part 2 says it is 'not limited' to Scope 3, when it would be correct to say it entirely ignores Scope 3 and the Court of Session judgement.
3. Neither as far as we can see do the new Jackdaw documents satisfy the 'Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020', schedule 6[2]. That schedule is very similar to the regulations assessed by judges in the Finch case in referring to 'indirect, secondary, cumulative … and long-term' effects. In particular, paragraph 4 of that schedule requires the environmental statement contain 'an assessment of the likely significant effects of the project on the environment, including those *resulting from* ... (f) the impact of the project on climate'. The Jackdaw documents do not contain this.
4. While Jackdaw is considerably smaller than the extremely damaging Rosebank, and probably mostly methane, it is important to explicitly emphasise the following: even accounting for substitution of production elsewhere (not considered in guidance, but conceivably relevant to IEMA methodology, s6.1) and liquefaction and transport overheads of LNG imports ostensibly offset by domestic production, project approval would add considerably to global CO_2 emissions on the order of tens of millions of tonnes[3], at a point where the world is passing both targets and tipping points.
5. The Shell/Adura document erroneously describes the project's GHG emissions as 'minor adverse and not significant'. As an example of how the high estimate of 35,823,000 tonnes of downstream CO_2 emissions is patently significant, it equates to approximately **9,000 human deaths** from climate effects before 2100, according to the IPCC-derived 'mortality cost of carbon'[4] or 'thousand tonne rule'[5].

---

1 https://assets.publishing.service.gov.uk/media/69203f99cf3db184075cfd90/Further_Information_Part_1_-_Scope_3_Emissions_Assessment.pdf

2 https://www.legislation.gov.uk/uksi/2020/1497/schedule/6

3 Muttitt et al (2025), op cit.

4 Bressler, R.D. The mortality cost of carbon. *Nat Commun* **12**, 4467 (2021). https://doi.org/10.1038/s41467-021-24487-w

5 Pearce JM, Parncutt R. Quantifying Global Greenhouse Gas Emissions in Human Deaths to Guide Energy Policy. Energies. 2023; 16(16):6074. https://doi.org/10.3390/en16166074 See also Pearce JM, Parncutt R. Quantifying Global Greenhouse Gas Emissions in Human Deaths to Guide Energy Policy. *Energies*. 2023; 16(16):6074. https://doi.org/10.3390/en16166074

6. That is just an example of likely indirect significant effects resulting from the project's impact on climate that have been omitted. The work to provide adequate information to inform the Secretary of State's decision, if it has been done, has not been done by Shell/Adura nor apparently by its consultants. OPRED's supplementary guidance refers to IPCC (2023), the Synthesis Report that also summarises indirect environmental effects of GHG emissions, including ocean acidification, droughts and continuing 'substantial damages, and increasingly irreversible losses, in terrestrial, freshwater, cryospheric, and coastal and open ocean ecosystems … risks of species extinction or irreversible loss of biodiversity'. Local damages from the Jackdaw project, not mediated by carbon flows from rock, would include discharges to sea, effects on harbour porpoises, Minke whales, hazards to fish, shellfish aquaculture, seabirds and shoreline sediment. However, if you downscale the loss of coral reefs between 1.5 and 2.0 °C, the Scope 3 emissions of Jackdaw would result in the destruction of something of the order of **13 km² of coral habita**t.[6] To understand the full environmental effects of a project like Jackdaw necessarily requires looking at global ecosystem effects under a variety of plausible emission scenarios, as well as estimating statistical expectation of damages from tipping points such as Amazon dieback and loss of glacier-fed ecosystems.
   6.a. Such an assessment as DESNZ/OPRED required is possible, as has been shown by a 2025 assessment of a gas project in Australia.[7]
7. The guidance referred to IEMA GHG assessment guidance *Assessing Greenhouse Gas Emissions and Evaluating their Significance*, as do the Jackdaw and Rosebank documents. However, we do not believe they are following IEMA. S6.1 says 'GHG emissions have a combined environmental effect that is approaching a scientifically defined environmental limit, as such any GHG emissions or reductions from a project might be considered to be significant'. This has been ignored when the documents do not consider huge emissions to be significant. If the 2017 version confirmed HS2 has significant climate effects, how is conceivable that North Sea O&G projects have not?
   7.a. IEMA says 'The consequences of a changing climate have the potential to lead to significant environmental effects on all topics in the EIA Directive (e.g. human health, biodiversity, water, land use, air quality)'. Again, the Shell/Adura documents entirely ignore the IEMA guidance.
8. The document misleadingly implies that the development aligns with Paris Agreement aligned production pathways. Even if it is predicated on all other fossil fuel developments being halted (which would not in any case be in line with the guidance of the assessment being 'cumulative'), this would be false. It also refers to 'frameworks like the Paris Agreement which aim to limit warming to below 2°C' which is a misrepresentation of the Paris Agreement which refers to '**well below** 2 °C' and the World Court ruled in July[8] that the primary temperature goal is the 1.5 °C target.
   8.a. Global gas production is already projected to be nearly double, 92% higher, than is compatible with the primary Paris target.[9]
9. The Government's 'Building the North Sea's Energy Future' document, which looks forward to just transition led by communities and workers with good, sustainable jobs and a healthier, fairer, prosperous future, also has an objective 'to take a globally standard-setting, **1.5°C** and climate science-aligned approach to future oil and gas production'. That objective translates globally into shutting down at least 60% of active extraction, and

---

6 Estimates of global shallow coral in Lyons et al (2024) https://doi.org/10.1016/j.crsus.2024.100015. See also IPCC (2018)

7 Perkins-Kirkpatrick et al, 'For the first time, we linked a new fossil fuel project to hundreds of deaths. Here's the impact of Woodside's Scarborough gas project' https://theconversation.com/for-the-first-time-we-linked-a-new-fossil-fuel-project-to-hundreds-of-deaths-heres-the-impact-of-woodsides-scarborough-gas-project-266060

8 Carbon Brief, 25 July https://www.carbonbrief.org/icj-what-the-world-courts-landmark-opinion-means-for-climate-change/

9 SEI/UNEP Production Gap Report (2025) https://productiongap.org/2025report/

certainly not adding any more.[10] Existing fields in production are already breaching the Paris targets, so in no way is new oil aligned with Paris.

10. The total amount of known, unexploited fossil reserves, including Rosebank and Jackdaw, is around 3.5 trillion tonnes of CO_2, or another 'trillionth tonne' of carbon. That vastly exceeds the above thresholds.[11] Were there any general rule to permit fields such as Jackdaw, warming would almost certainly exceed 3 °C above pre-industrial.
11. The IPCC's 'reasons for concern' ('burning embers') figures have been showing increasing perception of risk, and since the Paris Agreement there is new knowledge of the range of catastrophic tipping points, including Amazon dieback, ocean current collapse and metres of locked-in sea-level rise, beyond 1.5 °C.[12] A long-term tipping point resulting in mass extinction has been estimated Prof Daniel Rothman of MIT at roughly the amount of fossil fuel emissions corresponding to 2 °C.[13]
    11.a. The report has 'temperature highlighted as the key climate indicator', but it isn't really an environmental assessment; IPCC, especially WG2, also covers ocean acidification, while hydrological and ecological effects are non-linear and not properly represented by context-free, scalar temperature changes.
12. Various estimates have been made about the point when construction of new fossil fuel infrastructure must cease, from 2017 on, based on remaining carbon budgets[14] and expected lifetime of investments, such as the IEA's 2021.[15] So far as we know, all credible estimates are now passed, confirming that permitting new development would breach international climate commitments. Note that those commitments are independent of domestic NDCs or the concerns of CCC carbon budgets confusingly invoked in the 'executive summary'. In terms of global cumulative emissions, approving Jackdaw would not be consistent with a categorical imperative of the temperature targets, spelled out in detail by the UCL Bartlett report.[16]
13. Figure 3-2 on page 12 incidentally illustrates the 'slippery slope' hazard of permitting what are initially thought to be a limited number of new developments. The necessary peak to emissions is constantly being deferred, adding to global emissions. There is widespread ignorance that the IPCC had said the peak must be by 2025.[17]
14. The supplementary guidance rightly says 'characterising scope 3 emissions from a project solely in numeric terms against global GHG emissions would not on its own provide a meaningful expression of the global effect of those scope 3 emissions, because of the obvious difference in scale between individual projects and global emissions level'. Nevertheless, this is what the operator has presented, so that the assessment in meaningless. In presenting 'an assessment of scope 3 emissions in relation to the current state of climate and global emissions-reduction pathways' 23.6-35.8 $MtCO_2$ is significant when future baselines in those pathways exceed targets. Note that Shell ignores the examination of mitigation, merely mentioning possibility of CCS, without addressing a possible condition of 100% carbon takeback obligation.
15. Were government agencies to request a proper assessment with adequate information from Adura, it would not change the facts, just make them more obvious now that Scope 3

---

10 https://oilchange.org/blogs/shut-down-60-percent-existing-fossil-fuel-extraction-1-5c/ That was a 2023 assessment so the 60% figure for early retirement will now be higher.

11 https://carbontracker.org/finally-we-have-a-global-registry-of-fossil-fuels/

12 Eg Armstrong McKay et al (2022) https://doi.org/10.1126/science.abn7950 See also risk assessments by University of Exeter and the Institute and Faculty of Actuaries https://global-tipping-points.org/risk-dashboard/

13 Rothman (2017) https://doi.org/10.1126/sciadv.1700906#F4 See his 2019 paper for mechanism.

14 For example, Forster et al (2025) https://essd.copernicus.org/articles/17/2641/2025/

15 https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist

16 Muttitt et al, 'The Climate Implications of New Oil and Gas Fields in the UK', July 2025. https://www.ucl.ac.uk/policy-lab/sites/policy_lab/files/report-climate_implications_pages_online.pdf

17 Kenny and Geese (2025) 'We surveyed British MPs – most don't know how urgent climate action is' https://theconversation.com/we-surveyed-british-mps-most-dont-know-how-urgent-climate-action-is-266703

emissions are to be considered in environmental effects. Project approval always been conditional on this environmental assessment and on conditions which have changed since 2022.

16. If the Secretary of State's decision accepts tens of thousands of deaths and enormous, if distributed, environmental destruction as a result of granting consent; and a global policy compatible with such decisions that would result in around 3 °C of global warming and the consequent extreme risks of passing tipping points and mass extinction; and decides that habitability of the biosphere for future generations is not a concern either, then in our opinion it should make all that explicit to the public. Otherwise, the logical consequence is that Jackdaw must not proceed. This is a time to stand up for environmental regulation in the light of new knowledge and law. We look forward to the government drawing a clear line under new oil and gas.