Written evidence submitted by Uplift

How can the UK reduce reliance on oil and gas and accelerate the transition to net-zero?

1. Uplift[i] welcomes the Environmental Audit Committee's new inquiry into UK oil and gas and the opportunity to provide evidence.
2. Our evidence for this inquiry covers three interlocking questions:
    a. Does current policy and governance of UK oil and gas production ensure that UK oil and gas extraction is compatible with 1.5°C and the UK's climate goals?
    b. Does the North Sea Transition Deal support UK and international climate goals?
    c. Does the current fiscal regime for offshore oil and gas support the UK's domestic and international climate objectives?

Does current policy ensure that UK oil and gas extraction is compatible with 1.5°C and the UK's climate goals?

3. A large and credible body of research, including the International Energy Agency (**IEA**)[ii], Intergovernmental Panel on Climate Change (**IPCC**)[iii], Stockholm Environment Institute (**SEI**)[iv], and Welsby et al.,[v] demonstrates that the emissions from planned and current investments in global oil and gas production will exceed global carbon budgets for 1.5°C and that global fossil fuel production has peaked and needs to decline. Backed by this science, the head of the IEA[vi] and the United Nations Secretary-General[vii] have called for an end to oil and gas expansion and declines in production.

4. While domestic oil and gas production is already declining, planned[viii] and projected[ix] rates of decline are lower than the global and regional averages required by models. The

[i] Uplift is a not-for-profit initiative with a mission to support and energise the movement for a just and fossil-fuel-free UK.
[ii] The IEA's Net Zero by 2050 report find that to be consistent with a 1.5°C warming scenario, "no new oil and natural gas fields are required beyond those that have already been approved for development [in 2021]."[42]
[iii] The IPCC's Working Group III report finds that "Estimates of future CO2 emissions from existing fossil fuel infrastructures already exceed remaining cumulative net CO2 emissions in pathways limiting warming to 1.5°C (>50%) with no or limited overshoot (high confidence)."[43]
[iv] According to the Production Gap Report published by the United Nations Environment Programme (**UNEP**) and others, the level of fossil fuel production planned and projected worldwide by governments is more than twice (110%) the levels consistent with IPCC 1.5°C pathways in 2030, growing to 190% by 2040.[44]
[v] Welsby et al. find that almost 60% of oil and gas reserves must remain in the ground by 2050 to provide a 50% chance of limiting global temperature rise to 1.5°C.[45]
[vi] The IEA's Executive Director stated in May 2021 that "If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year."[46]
[vii] The UN Secretary General – responding to IPCC's WGI Report – called on countries to "end all new fossil fuel exploration and production."[47]

UK is also pursuing further oil and gas expansion, announcing a new oil and gas licensing round as part of the British Energy Security Strategy[1] and championing the approval of new developments[2].

5. Consideration of production decline pathways will often give rise to questions of energy security. However, it is vital to consider domestic production within the global and regional markets that determine where UK oil and gas is used.[x] The UK's energy security is not directly proportionate to the domestic production of oil and gas. For example, research commissioned by Uplift from Acasta Risk shows that in a scenario without new licensing rounds, there is still a reduction in relative import dependency compared to the CCC's Balanced Net Zero Pathway in 2030 and 2050 (2018 baseline).

6. Exploiting domestic reserves is also very unlikely to displace extraction in other countries. There are two main reasons why this displacement can and should not be expected:

    a. The first reason is economic. New UK oil and gas production would need to outcompete on emissions, cost and return on investment with the global portfolios of oil and gas producers. The UK Continental Shelf (**UKCS**) is a mature, high cost[3] basin, with production emissions that are only average by global standards[4]. The nature of global fossil-fuel markets make it highly likely that any new production in structurally uncompetitive basins like the UKCS would be additional to extraction activities elsewhere in the world, leading to additional global emissions.[5,6] Conversely, there is ample theoretical and case-study evidence that reduced oil production leads to lower oil consumption and lower emissions globally, such as that from SEI[xi] (US) and Rystad Energy (Norway).[xii7] Such arguments usually focused on UK gas should also not distract from the fact

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[viii] Subject to an updated corporate plan for the NSTA, it remains both industry and the NSTA's aim to limit annual declines in production between 2018 and 2035 to around 2%[48]. The Production Gap Report (PGR) finds that global oil and gas supply must be reduced by an average of 4% and 3% per year over the next decade to be consistent with 1.5°C.[44]

[ix] Projected decline rates: Rystad Energy data shows +1% and -2% annual growth rates for oil and gas production for 2021-2030. NSTA data shows 6% for oil and 8% for gas from 2021 to 2050. Note the NSTA simply assumes a decline of 6% for oil and 9% for gas from 2026 to 2050, and systematically underestimates near term production – with 140mmboe more oil and gas (6%) produced between 2017 and 2020 than its February 2017 projection.

The IEA net-zero emissions scenario sets out an average annual decline rate of 8% for oil and gas (European level)[49]. Welsby et al. find that UK oil and gas extraction should decline at rates of 6% and 7% on average per year respectively to provide a 50% chance of limiting global temperature rise to 1.5°C.[49] Rystad Energy data decline rates exceed IEA, PGR and Welsby et al decline rates. NSTA plans exceed the decline rates in IEA, PGR and Welsby et al. NSTA projections for oil also exceed IEA rates and only match those in Welsby et al.

[x] Oil is traded as a global commodity with 78% of UK production exported[50]; the gas market is regional, with around 24% of UK production exported[51].

[xi] A review by SEI found that for each barrel of oil not produced, about 0.5 barrels less will be consumed globally.[52]

[xii] A report for the Norwegian oil and gas industry group Norsk olje & gass is particularly instructive. It is estimated that for oil 91% of any Norwegian production cut is replaced by the global market.[53] Even in this conservative scenario, cuts in Norwegian oil production lead to a global emissions reduction of 8kgCO2/barrel. Norwegian oil production is, on average, 62% less polluting than the UK's[54] meaning the effect would likely be larger.

that the UKCS is a heavily oil-weighted basin, with 70% of discovered resources being oil.

b. The CCC has noted the relationship between increased extraction and increased overall emissions for onshore oil and gas extraction[7]. For offshore extraction, the committee could not determine the net effect on global emissions from reductions in extraction[8]. This is an unusual discrepancy and may reflect political caution on the CCC's part, given the timing of its advice on offshore licensing. As noted in 6a, while there is a lack of UK specific research on this issue, it remains improbable that the net effect of ending UK fossil fuel extraction would be emissions increases[9].

a. The second reason is the UK's position as one of the wealthiest countries in the world and its significant cumulative global emissions. Limiting warming to 1.5°C in line with the Paris Agreement, to which the UK is a party, necessitates that countries act consistently with the principle of common but differentiated responsibilities and respective capabilities (**CBDR-RC**).[10,11] The CCC has stressed that the UK's significant responsibilities and capabilities mean "the UK should aim for emissions reductions more ambitious than the world as a whole".[12] SEI has also found that high-income countries alone would exceed global pathways for oil and gas production consistent with limiting warming to 1.5°C or 2°C in the next two decades.[13] In this context, it is challenging to reconcile the UK's decision to ban Export Finance[14] for fossil fuel projects abroad with its push to give North Sea fields "a new lease of life"[1].

7. Any future production from the UKCS must be consistent with what is needed globally to deliver 1.5°C[xiii] and the goals of the Paris Agreement, including the UK's commitment to the principle of CBDR-RC[15]. Whether factoring in CBDR-RC or not, UK specific decline rates such as those modelled by Welsby et al.[xiv] and Caverley and Anderson[xv] demonstrate that UK must decline production significantly faster than the global average. Policies seeking to increase production compromise the necessary declines in the near term and risk locking in emissions; The long lead time to develop new fields[xvi] and the investment required to bring new fields online means companies will continue production to recover investments made and meet their obligations as licensees (see 8a).

[xiii] The 1.5°C temperature goal of the Paris Agreement – described by PM Boris Johnson as 'critical'[55] – is the most appropriate target for the climate checkpoint. As the IPCC Special Report on Global Warming of 1.5°C made clear, severe climate impacts will be faced even with 1.5°C of warming above pre-industrial levels. Global warming of 2°C rather than 1.5°C would significantly increase the risks and impacts of climate change in the UK and around the world[56]. This was highlighted by the outcome of the UK-led COP26, which resolved to pursue the 1.5°C goal[57].

[xiv] Welsby et al. find that UK oil and gas extraction should decline at rates of 6% and 7% on average per year respectively to provide a 50% chance of limiting global temperature rise to 1.5°C. [49]

[xv] Caverely and Anderson find that for the wealthiest producing countries such as the UK, "output of oil and gas needs to be cut by 74% by 2030, with complete phase-out by 2034" for a 50% chance of not exceeding 1.5°C of global warming.[58]

[xvi] OGA research shows that the average time taken from discovery to the first production from a field on the UK Continental Shelf is 28 years[59]. On average, new licenses issued this year would lead to fields being brought online in 2050, by which time the UK needs to have transitioned to a net-zero economy.

8. Current UK governance frameworks do not consider whether extracting the UK's oil and gas reserves are compatible with 1.5°C and the Paris Agreement. Several mechanisms link production to the UK's carbon targets yet fail to ensure alignment with international climate goals fully:

    a. The North Sea Transition Authority (**NSTA**) Strategy includes a central obligation on those with licenses and infrastructure to assist the Secretary of State with meeting the net-zero target, therefore only covering production emissions of oil and gas.[16] Importantly, the Strategy does not impose an obligation on the NSTA itself – it merely articulates a high-level principle that the NSTA will encourage and support industry to reduce emissions "as far as reasonable in the circumstances", with the NSTA's principal objective remaining to maximise economic recovery (**MER**) of reserves.[17] The obligation also does not directly apply to applicants for new petroleum licenses. Indicative of the friction between its obligations, the NSTA's Corporate Plan aims for declines in UK oil and gas production half that of what is required globally to keep 1.5°C.[18]

    b. The North Sea Transition Deal (**NSTD**) includes a commitment by the sector to reduce emissions by 50% by 2030 towards a net-zero basin by 2050.[19] The NSTD does not consider or align with the 1.5°C goal of the Paris Agreement or the UK's climate targets, as discussed in the next section. The modelling underpinning the NSTD from Offshore Energies UK again assumes that production declines globally to keep to 1.5°C.

    c. The environmental impact assessment process for individual oil and gas projects requires regard to the impact on climate.[20] However, the Regulations do not stipulate what this requires, with no mention of considering the project's impact on the efforts to meet 1.5°C or net zero.

    d. The proposed climate compatibility checkpoint purports to test whether the issuing of new licenses is compatible with the UK's climate objectives.[21] It remains uncertain whether this will consider the 'global production gap' or scope 3 emissions, which would align more closely with the UK's international obligations. But, regardless of its design, the checkpoint proposed would only apply ahead of potential new licensing rounds and not to existing production or proposed new developments, and so will not provide a rigorous test of the climate compatibility of already producing fields or new fields.

    e. The UK Offshore Energy Strategic Environmental Assessment process covering future leasing/licensing is explicit in not assessing the environmental effects of scope 3 emissions and, therefore, does not effectively consider the impact of oil and gas production on meeting 1.5°C.[22]

9. UK government support for expanding oil and gas production does little to address energy security concerns but greatly exacerbates climate concerns. Target rates of decline for UK oil and gas production are inconsistent with global average decline rates required to limit global temperature rise to 1.5°C in line with the Paris Agreement and even further out of step with modelled UK specific decline rates. This inconsistency

reflects the absence of a governance framework requiring the industry to be regulated in line with goals under the Paris Agreement or domestic carbon targets.

Does the North Sea Transition Deal support the UK and international climate goals?

10. As outlined above, the governance of the UK's oil and gas sector is incapable of delivering on the UK's broader climate goals. This can, in part, be explained by the NSTD.

11. Unfortunately, the deal's emissions targets – focussed on production emissions – are weak. The CCC describes the NSTD target of reducing offshore oil and gas production emissions by 50% by 2030 (relative to 2018 levels) as "significantly lower than the recommendation in our Sixth Carbon Budget advice", which advises a 68% reduction over the same period[23]. The NSTD, therefore, undermines the UK's carbon budgets. It is unclear how the Net Zero Strategy reconciles this gap.[24] The NSTA has also hinted at the NSTD's lack of ambition, stating that it sees meeting the NSTD emissions targets as the 'OGA's [NSTA's] minimum expectation for the sector'[25].

12. Indeed, the current 50% target is so weak that the NSTA's analysis shows that the industry can meet the 2025 and 2027 NSTD targets without additional action due to declining production (Figure 1)[26]. Industry data predicts that absolute production emissions will increase (relative to the 2018 baseline) before falling to meet the target[27]. Failure to align with CCC budgets will also increase the decarbonisation required by other sectors to meet domestic targets. Production emissions budgets, rather than targets, would be more appropriate.

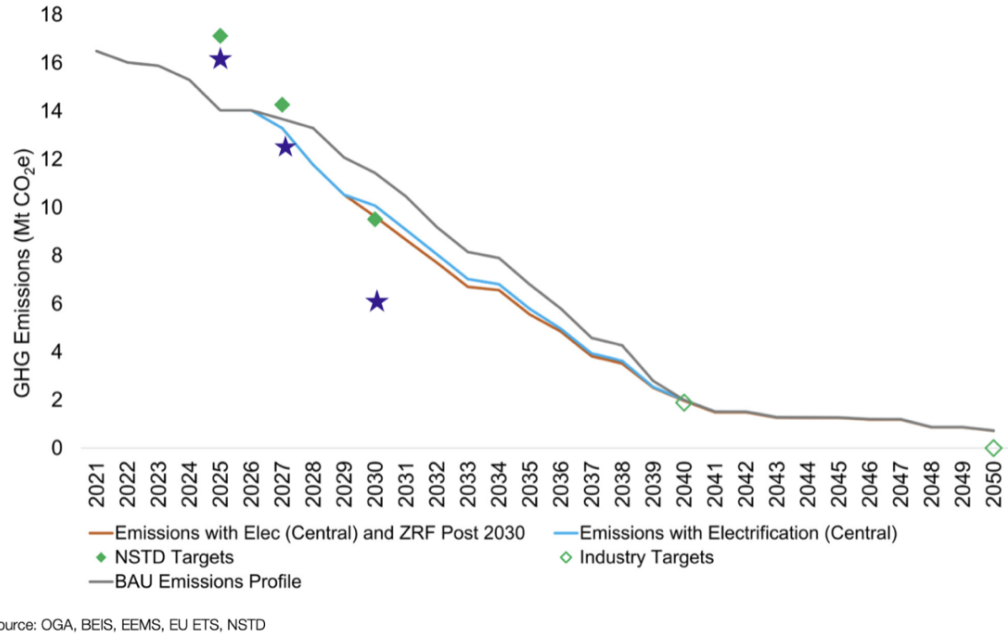

Figure 1 Technical projection of UK upstream oil and gas GHG emissions for BAU baseline and abatement scenarios, adapted by Uplift. Purple stars show the CCC's targets, which require more ambitious abatement (Adapted from OGA Emissions Monitoring Report 2021[26]). Three of the five targets fall on or above the BAU baseline, meaning no additional abatement action would be required to achieve them.

13. There is little empirical sign of buy-in to NSTD targets or investment in the transition despite industry rhetoric. Uplift reviewed the public commitments[xvii] of all 49 operators currently producing on the UKCS and found that:

    a. **Less than half (49% (n=24)) of UK oil and gas producers have a net-zero target,** despite the legal requirement on the NSTA to manage the transition to a net-zero basin.

    b. **Almost a third (29% (n=14)) of companies have no target at all for their production emissions,** raising doubts over the ability of the NSTD to deliver the required cuts in emissions.

    c. **Only 6% (n=3) have an absolute target covering all extraction emissions for the oil and gas they produce,** and an additional 6 (12%) have a partial target. Only one operator has committed to reducing oil and gas production by 2030.

    d. **Just 55% (n=27) invest in renewables[xviii], and only 22% (n=11) invest in UK renewables**, highlighting the flaws of looking to the sector to lead a transition to a renewable energy future.

14. The lack of ambition around the NSTD is perhaps unsurprising given its history and legal status. An FOI submitted by Uplift shows that the NSTD was in effect written by the oil and gas industry group (then Oil and Gas UK) and submitted to Government in January 2021. The structure and asks of this document are almost identical to the final deal, rather than reflecting what is needed to meet net-zero goals. Further, even the included commitments do not necessarily need to be adhered to. The NSTA has made clear in relation to Government Guidance referencing the NSTD that its implementation is voluntary, stating that:

    "the Guidance requires only that licensees give consideration, in taking decisions, to the commitments made within the deal; it does not create an obligation to carry out any activities."[28]

15. Not only is the NSTD not fit for purpose, but its implementation lacks independent oversight. Reviews of the progress on implementation are chaired by an industry representative alongside BEIS and supported by a secretariat hosted by industry group OEUK.[19]

16. Overall, the weak targets and legal status of the NSTD mean it is incompatible with the UK and international climate goals and is incapable of supporting an orderly renewable energy transition.

[xvii] Uplift used publicly available data to identify climate targets and renewables investments for 49 companies with producing assets (Q1 2022) on the UK Continental Shelf. The list of producers was obtained through Rystad Energy. Of these, all 49 had a publicly available website. Websites, policy documents and reports were reviewed in Feb 2022 for climate targets and renewable investments across their UK and global operations.

[xviii] Of these, just 16 companies (32%) were identified as investing in renewables for the grid (at least partially), as opposed to investing purely to offset their own production emissions.

Does the current fiscal regime for offshore oil and gas support the UK's domestic and international climate objectives?

17. Above, we have outlined that the science suggests reconciling domestic oil and gas extraction with the UK's climate goals is unlikely and that current policy approaches do not attempt to make this reconciliation. Therefore, as the consultation asks, is it appropriate for the Government to provide tax relief or financial support to the industry? And does this challenge its climate goals?

18. The UK's tax regime is one of the most generous to oil and gas companies by any measure, with the average Government take substantially lower than the global average[xix] . It is the most profitable country globally for oil and gas companies to develop big projects[29]. In traditional oil economics, a "good" fiscal regime ensures that the breakeven price for developments is kept low while maximising the Government take. The UK has prioritised the former over the latter.

19. This is not by accident. When implementing sweeping changes to support the oil and gas industry in 2016, the Government stated that the "radical package will ensure the UK has one of the most competitive tax regimes for oil and gas in the world"[30] – effectively choosing to forgo state revenue to maximise private profit. It is hardly surprising that against this backdrop, as oil and gas prices have soared, politicians across the political spectrum have called for increased contribution from industry[xx] to bring the UK's fiscal regime in line with international competitors.

20. Successive UK governments have been "unusually explicit about the deliberate use of fiscal measures to increase extraction" of petroleum[31]. However, the Government denies that available support measures constitute subsidies to upstream oil and gas[xxi]. It does this by incorrectly using a definition only intended to apply to "fossil fuels […] consumed directly by end-users or consumed as inputs to electricity generation"[32]. This impacts the probity of the Government's claims and its commitments through the Glasgow Climate Pact to "phase-out inefficient fossil fuel subsidies"[33].

21. Regardless of the label, direct transfers of funds, the transfers of liabilities, and the non-collection of tax revenue incentivise new extraction. In short, the tax regime reflects the NSTA's Maximising Economic Recovery mandate, not net-zero. The following examples are indicative:

[xix] Government take is defined as the present value of the government take divided by the present value of the profit, where profit is revenue minus investments and operational costs. Rystad Energy estimate average government take at 71%, with the UK's the lowest assessed at 37%. Only the UK Falkland Islands, Russia and Guyana have a government take below 55%.

[xx] [60]Labour and the Lib Dems are currently calling for a "windfall tax".[60]

xxi In the view of the Government: "The UK does not give any subsidies to fossil fuels, and follows the approach of the International Energy Agency, which defines fossil fuel subsidies as measures that reduce the effective price of fossil fuels below world market prices.". The IEA uses a consumption only approach to subsidies. The measures outlined in our evidence meet both the WTO and IMF definition of a subsidy[31]. The Glasgow Climate Pact calls upon countries to 'phase-out of inefficient fossil fuel subsidies'. The Committee on Climate Change has called the governments definition "narrow" and says the UK Government has a duty to act on Glasgow Climate Pact and should review subsidies and support to fossil fuels[61]. There is no such thing as an "efficient" fossil fuel subsidy it argues.

a. **Tax relief for exploration**. The capital cost of oil exploration and appraisal activity may be relieved in full[34].

b. **Tax relief for new fields.** 100% first-year capital allowance for new oil and gas dramatically abbreviates payback time for marginal projects. This is in effect a "government-provided hedge" that "boosts the expected rate of return on the investment enough to clear the investors' minimum rate of return." The result is that "long-lived, fossil fuel-intensive capital is deployed that otherwise would not have been, and emissions impacts may be felt for years or decades"[35].

c. **Investment Allowance.** In one model, the Investment Allowance – introduced as part of fiscal reforms to counter low oil prices – may enable the extraction of an additional 700 million barrels of oil equivalent, with most extraction occurring in the 2020s[36]. One estimate puts the emissions equivalent of this additional extraction at 10 years' worth of UK coal production[31].

d. **Decommissioning Relief Deeds.** Decommissioning relief deeds guarantee future tax relief for oil and gas companies and could enable the extraction of 1.7 billion barrels of oil equivalent that would otherwise have remained unextracted[37]. Uptake has been greater than this model assumed. As of March 2021, the Government had signed 98 deeds[38].

e. **The industry spends R&D tax relief on increased extraction technologies.** Research shows despite £150 million in R&D tax relief over two years, only 5% of the patents filed by UK fossil fuel exploration and production companies were for climate change mitigation[39].

22. In short, we argue that the UK's fiscal regime "buys" investment. At the time of the most recent round of fiscal changes, experts suggested: "other governments are not comfortable with the policy" as it unfairly boosted the attractiveness of the UKCS. Such "radical"[xxii][40]approaches to offshore tax create more risk for the public purse, incentivise more extraction and make UK oil and gas artificially competitive – pushing extraction that is incompatible with the global oil and gas (carbon) budgets.

23. Robust policies to manage the decline of oil and gas extraction are a crucial component of the UK transition. The UK public is likely to lose out more without them. Supply-side measures are more cost-effective climate policy than demand-side abatement alone, with domestic demand-side interventions alone costing double that of balanced supply restrictions and demand-side policy[41].

24. Overall, the generous tax reliefs and financial support provided to the fossil fuel industry incentivises UK production where it would otherwise be uneconomic and pushes extraction that cannot be reconciled with the UK's climate goals. This increases the risk to the public economically and fails to contribute to protecting the UK from dangerous climate change.

May 2022

[xxii] See, for example, Boue J., 2019 for a review[40].

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