WOULD MORE NORTH SEA OIL AND GAS MAKE BRITAIN’S ENERGY CHEAPER OR MORE SECURE?

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SUMMARY

- Conflict in Iran has once again highlighted Britain's exposure to international fossil fuel markets, leading to calls to increase production of North Sea oil and gas by revisiting current policies.
- If current policies were changed to support increased production e.g. through allowing licences for new exploration or changes to tax policy, there are a broad set of impacts to consider.
- Here we focus on two key tests: would it cut prices, and would it make the UK more resilient?
- On prices, the answer is largely no. Oil and gas prices are set in international markets, so even an optimistic view of the increase in UK production that is achievable would do little to bring down bills.
- Any material increase would also not happen quickly and so cannot be a solution to a near term shock.
- On resilience, the situation would be improved, but in a limited way. More domestic production could reduce import dependence, especially for gas, but we would continue to rely on imports from Europe (which in turn is likely to rely on LNG).
- The resilience case is weaker for oil than for gas. UK consumers require refined fuels, and the vast majority of UK crude is exported. More offshore oil production does not, therefore, translate directly into greater resilience.
- As a result, any case for more North Sea production should focus more on broader potential impacts on growth, jobs, tax revenues and emissions, as well as on the UK's position as an international climate leader.

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WOULD MORE NORTH SEA OIL AND GAS MAKE BRITAIN'S ENERGY CHEAPER OR MORE SECURE?

Energy security has returned to the top of the policy agenda. The war in Ukraine highlighted how quickly geopolitical shocks can drive up oil and gas prices. More recently, conflict involving Iran has again disrupted energy markets and pushed oil and gas prices up. Despite recent progress developing renewable supplies, three-quarters of the UK's energy consumption still relies on fossil fuels.[1] Britain therefore remains exposed to international fossil fuel markets, and that exposure is uncomfortable.

This has led to questions about the future of North Sea oil and gas. The eventual phase out of production from the UK Continental Shelf (UKCS), the UK's offshore oil and gas producing basin and main source of domestic supply, is inevitable. However, the current crisis has led many commentators to argue that the pace of that decline should be slowed, potentially increasing the volumes ultimately extracted, so that consumers can benefit from more secure supplies and lower prices.

If current policies were changed to support increased production e.g. through allowing licences for new exploration or changes to tax policy, there are a broad set of impacts to consider. Potential impacts on prices and security of supply are important. But there will also be wider considerations such as potential impacts on economic growth, employment, taxes, and carbon emissions, as well as any wider impacts on the UK's position as an international climate leader.

In this first briefing, we focus on price and security of supply impacts. We intend to address wider economic and climate impacts in a second note. To unpack the impacts on prices and resilience we focus on three questions:

- First, what is the potential for increased production, and how quickly could that additional production come through?
- Second, would increased production materially reduce the prices paid by GB consumers?
- Third, would increased production materially improve resilience?

We conclude that the potential for increased production is uncertain, and that analysts agree that any material increase would not happen quickly and so cannot be a solution to a near term shock. We conclude that, in the medium term, even if the more optimistic scenarios for potential production increases were to materialise, it would not significantly change wholesale prices for oil and gas in the UK. We also find that the impact on resilience would be limited: while domestically produced supplies would increase, we would still remain reliant on imports.

1 In 2024, 75.2% of UK primary energy consumption came from fossil fuels, Digest of UK Energy Statistics 2025

This does not necessarily mean there is no case for increased production. However, it means that the case should not place significant weight on price and resilience impacts. We will consider the importance of the other relevant considerations in the second briefing.

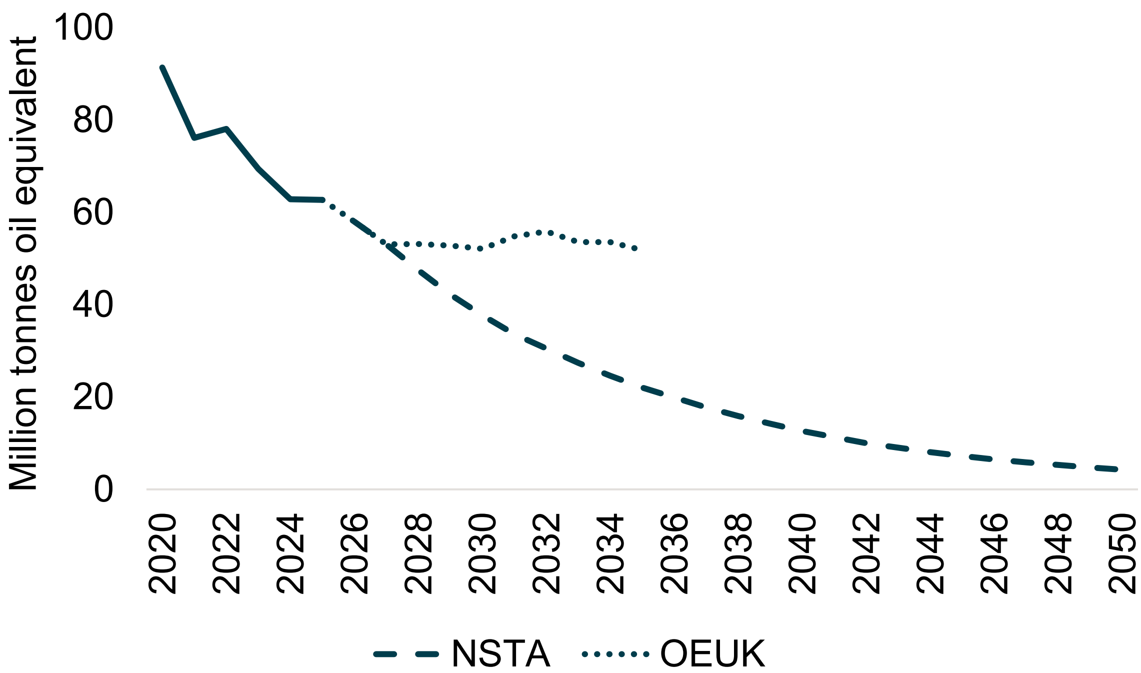
What is the potential for increased production from the North Sea?

This is a difficult question to answer definitively. But we can put bounds around the possibilities by looking at some different publicly available projections.

The North Sea Transition Authority (NSTA) which regulates the UK oil and gas industry, projects declining production, consistent with current policies including continuation of the existing tax regime and the government's ban on new licences for exploration over time.

The impact on production of a more supportive fiscal, regulatory and licensing environment is uncertain. Ultimately, the attractiveness of increased production is dependent on a wide range of factors, including the difficulty and cost of additional extraction versus the attractiveness of expected future oil and gas prices. Offshore Energy UK (OEUK), which represents the offshore energy industry, is significantly more optimistic than the NSTA projection as to what can be achieved in the period up to 2035 if policies are directed to encourage more production.

Figure 1 Oil and gas production expectations



Source: NSTA and OEUK

Note: NSTA projections as of February 2026 include baseline production plus undeveloped and future discoveries; OEUK categorises these as baseline, infill projects, other developments and new developments.

Both of these projections involve some degree of judgement and may therefore represent reasonable bounds for potential outcomes. If the OEUK numbers are achievable, the potential increases in oil and gas production could be more material: relative to the NSTA, they project that production could be two times higher by 2035.

What does not seem to be in doubt, however, is that any such increases will take time to come through. Over the next two years, projections from both OEUK and the NSTA are closely aligned, with total production expected to decline. A change in policy seems likely to have limited impact in the current crisis. The key question for policymakers really relates to the medium term, when material increases in production are at least feasible.

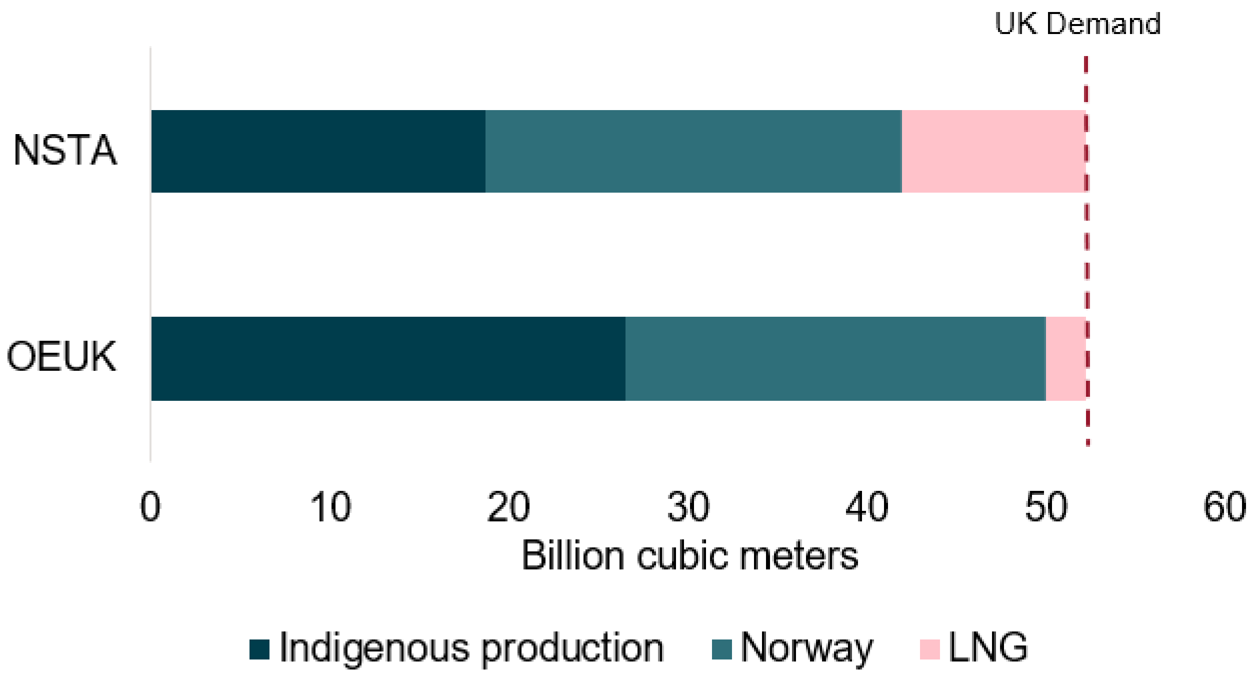
Would more North Sea production reduce prices?

Some commentators have argued that if Britain produces more of its own oil and gas, it should need fewer imports, and that should make energy cheaper. But that is not how these commodity markets work.

Oil and gas are internationally traded commodities. Britain is a net importer of both, so domestic production meets only part of our demand. This matters, because it means that extra North Sea production does not create some sort of separate cheap pool of energy for British consumers. Domestic producers have no reason to sell materially below a price that could be achieved internationally, because to do so would simply mean giving up revenue. In fact, this would remain true even if our production was equal to our national demand. Provided markets are sufficiently well interconnected, domestic producers would still be able to divert their production to exports if the domestic price were lower.

In the gas market, if material increases in UKCS production were possible (e.g. in line with OEUK estimates), these volumes could displace more expensive sources of Liquefied Natural Gas (LNG) from flowing into the GB market (see Figure 1).

Figure 2 UK gas supply outlook and import mix to 2030

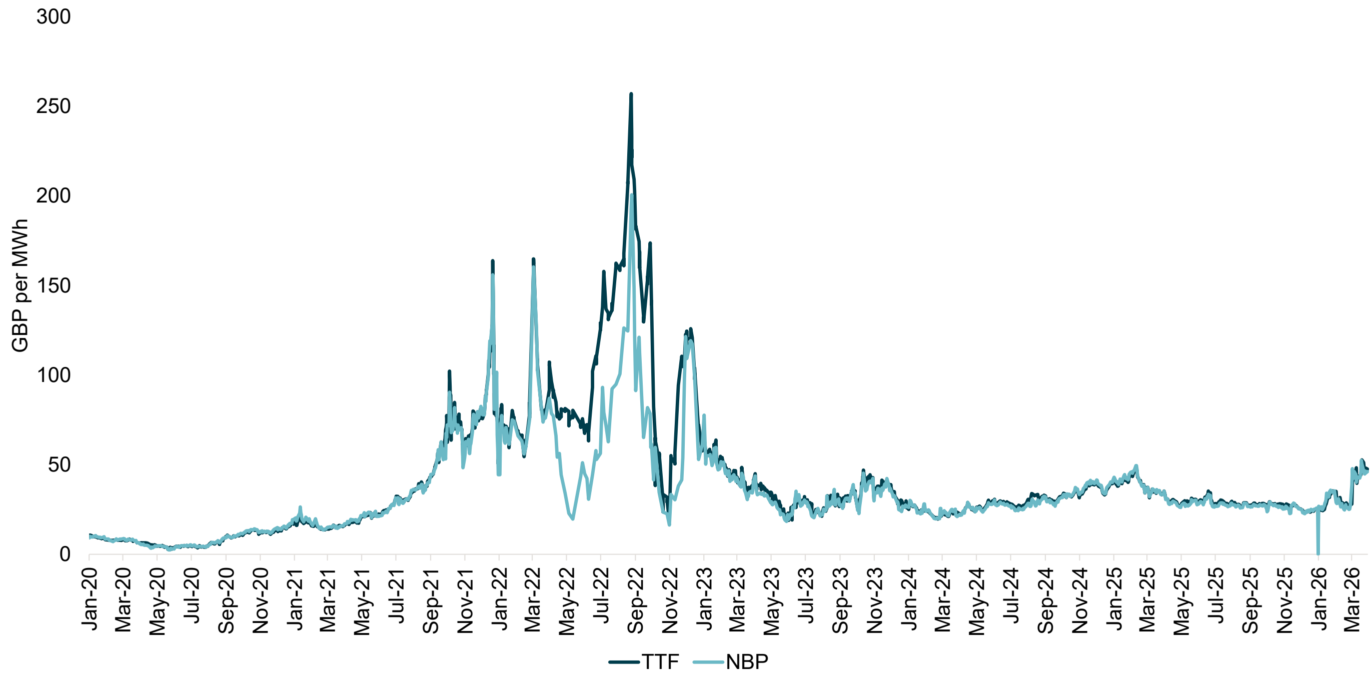


Source: Frontier Economics based on OEUK and NSTA

Note: Indigenous production in the NSTA case reflects NSTA's February 2026 projection and includes baseline production, undeveloped discoveries and future discoveries. All other values, including imports from Norway, LNG imports and demand, are from OEUK Business Outlook 2026. Production projections in the OEUK case include baseline output, infill wells and new developments.

Some commentators have argued that if we import less LNG, prices should fall in GB as a result. However, our market is closely interconnected with Europe. Even if we do not physically import any LNG, the GB price will continue to be set with reference to the price in European markets (if it were lower, we would not be able to attract imports of gas from Europe). This is evident in the close correlation between GB (National Balancing Point or NBP) and Netherlands (Title Transfer Facility or TTF) prices over the past five years

Figure 3 Historic NBP and TTF prices



Source: *European Energy Exchange (EEX) until October 2025 and Bloomberg from October 2025*

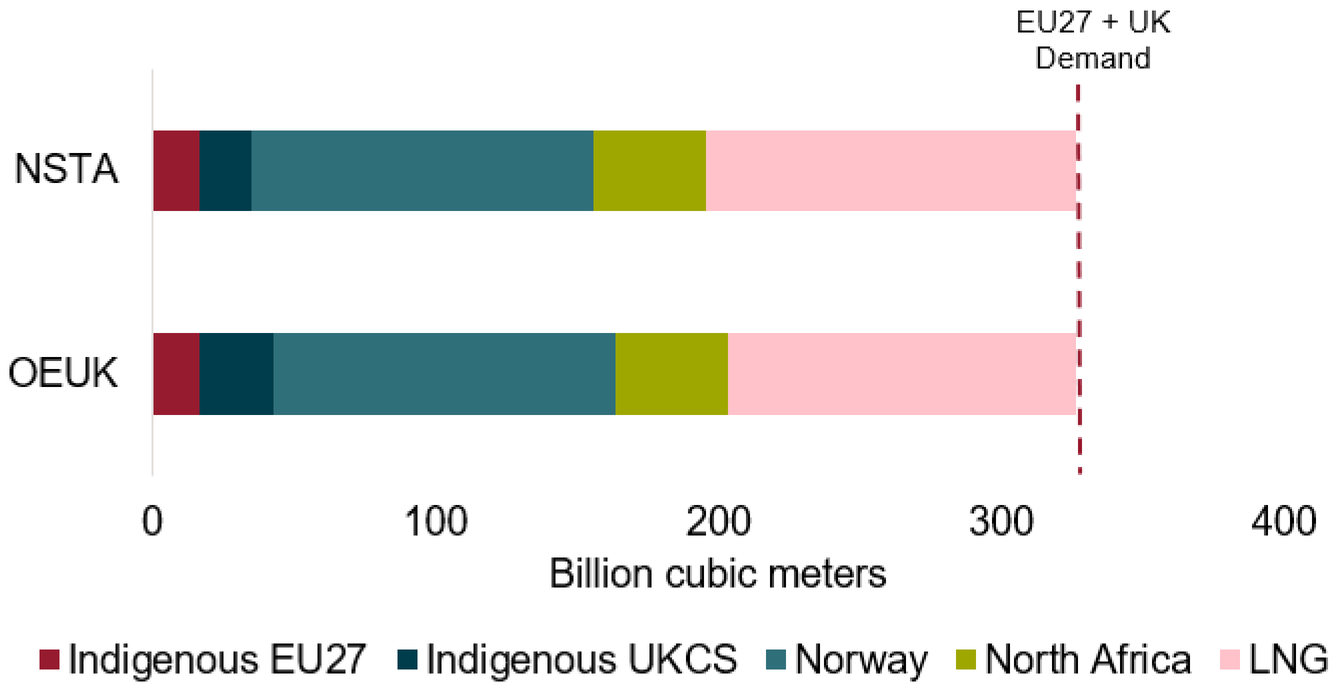
Note: *Day ahead prices. NBP prices are quoted in pence per therm and are converted to GBP/MWh using a therm-to-MWh conversion. TTF prices are quoted in EUR per MWh and are converted to GBP/MWh using daily European Central Bank exchange rate*

The question then becomes what an increase in UK production (and hence reduced UK imports of gas) would mean for European markets. And while in some scenarios the potential increase in production could be material in the context of the GB market, even on the OEUK numbers it would be very small relative to the wider European market (e.g. 2% of EU27 and UK gas demand in 2030[2]). LNG is a major source of supply to the European market: in 2024, it accounted for around 40% of Europe's supply.[3] If LNG continued to set the price frequently in European gas markets, even if increased UKCS production meant that we did not physically import any LNG, the price of gas in GB would continue to be set with reference to the cost of LNG.

2 The 2% figure reflects the difference between UKCS production levels projected by OEUK and those assumed by the NSTA for 2030, expressed as a share of projected total gas demand across the EU27 and UK in 2030.

3 ACER (2025) *Analysis of the European LNG market developments 2025 Monitoring Report*. Available online at https://www.acer.europa.eu/monitoring/MMR/LNG_market_developments_2025

Figure 4 EU27 and UK gas supply outlook and import mix to 2030 assuming different UKCS production scenarios



Source: Frontier Economics based on NSTA, OEUK and ENTSOG

Note: Demand, indigenous production and net imports for EU27 are based on ENTSOG TYNDP 2024 (methane only). UK demand is based on DESNZ net zero consistent projections, as reported by the NSTA. No imports from Russia are assumed. Pipeline imports from Norway and North Africa are held constant at 2025 levels, as reported by the European Commission. LNG imports are calculated as the residual required to balance supply and demand.

The same logic holds for oil. Crude oil is easier to transport than natural gas, and so the price of crude oil in the UK is linked to the price on international markets. Again, UK producers would have no reason to sell their oil for less. Unless increased UK supplies of crude changed the price on international markets (which in turn depends on the balance of supply and demand internationally), it would not have a domestic price impact. As with gas, even the potential production increases projected by OEUK would be small relative to the international supply of crude products comparable to UKCS output.

Would more North Sea production materially improve resilience?

While the impact on price is expected to be trivial, if material increases in production were feasible, it is still worth considering whether this could reduce UK's import dependence and improve our energy security. In the case of severe disruptions, the government could intervene to ensure that increased UKCS production was available to UK consumers (e.g. by preventing exports). However, while increases in UK production are beneficial, the reality is that, even at the upper end of the scenarios for increased UKCS production, the UK would continue to rely on imported supply.

In the last 10 years, GB imported 45-57% of the natural gas we consumed.[4] In 2030, import dependency could rise to 64% (NSTA) or remain similar to today at 49% (OEUK), with those imports being a mixture of gas imported from continental Europe via pipeline and gas imported through LNG terminals. At the top end of scenarios for increased production, import dependency in 2035 would reduce to 42%.[5]

Some commentators have argued that if such a reduction in import dependency were to mean we no longer had to rely on physical imports of LNG, then our supply would be more resilient. While it is true we would be able to meet a greater proportion of our demand from domestic supplies, under any credible scenario, we would remain dependent on pipeline supply from Europe. This means that our supply security is linked to that of the European market overall. As shown in Figure 4 above, Europe may still itself be dependent on LNG supplies. And even if Europe were not dependent on LNG, in a supply crunch, there would be a need to ration gas across all European consumers. The level of curtailment of GB demand would depend on how much European gas we were "allocated" in such a situation.

The oil case is narrower still. Consumers do not use crude oil directly: they use refined products such as petrol, diesel, jet fuel and so on. So oil resilience does not depend solely on how much crude is extracted offshore. It depends critically on refining capacity, product imports, and storage.

In fact, around 90% of UK crude oil production is exported. In 2024, UK refineries took only 4 million tonnes of UKCS crude (down 41% on 2023), meeting 7.7% of refinery demand (compared to 13.3% in 2023).[6] And while UK refineries produced more petrol than consumed domestically, in 2024 they produced only 55% and 29% of diesel and jet fuel demand respectively.

Given these supply patterns, the claim that increased North Sea crude production would improve resilience in key transport fuels is weaker than for natural gas.

Key takeaways

Recent geopolitical developments have renewed attention on the role of North Sea production, alongside calls to revisit existing policies on licensing and taxation.

Increases in UKCS oil and gas production would have limited relevance as a response to the near-term impacts of current geopolitical uncertainty, given the time required for material new supply to come online.

4 DESNZ (2026) *Energy Trends: UK gas.* Table 4.2 (natural gas supply and demand, annual data); calculated as net imports relative to demand. Considering the last 10 years, import dependency peaked in 2021 and has averaged 48%. Available online at: https://www.gov.uk/government/statistics/gas-section-4-energy-trends

5 Considering OEUK (2026) *Business Outlook*, Figure 7.

6 DESNZ (2025) *Statutory security of supply report: 2025.* Available online at https://www.gov.uk/government/publications/statutory-security-of-supply-report-2025/statutory-security-of-supply-report-2025

Over the medium term, even under more optimistic assumptions, higher production would be unlikely to materially reduce the prices faced by GB consumers, as oil and gas prices are set on international markets and European gas prices are closely linked to the cost of LNG.

In terms of resilience, increased production could reduce import dependence to some extent. But the UK would continue to rely on imports (including of LNG delivered to Europe) to meet demand.

These findings do not, in themselves, determine whether policy should change. However, they suggest that any rationale for change would need to be based on wider factors, including economic growth, employment, taxes, and carbon emissions, as well as the importance of international climate leadership. We will consider those factors in our second briefing on the topic.

Sources

ACER (2025) *Analysis of the European LNG market developments 2025 Monitoring Report*. Available online at https://www.acer.europa.eu/monitoring/MMR/LNG_market_developments_2025

DESNZ (2025), Digest of UK Energy Statistics. Annual data for UK, 2025, Available at: https://assets.publishing.service.gov.uk/media/68dbe477ef1c2f72bc1e4c4d/DUKES_2025_Chapters_1-7.pdf

DESNZ (2026) *Energy Trends: UK gas.* Available online at: https://www.gov.uk/government/statistics/gas-section-4-energy-trends

DESNZ (2025) *Statutory security of supply report: 2025.* Available online at https://www.gov.uk/government/publications/statutory-security-of-supply-report-2025/statutory-security-of-supply-report-2025

ENTSOG and ENTSO-E (2024), TYNDP 2024 Scenarios. Available online at: https://2024.entsos-tyndp-scenarios.eu/scenario-results/

NSTA (2026) *February 2026 Production and expenditure projections*. Available online at https://www.nstauthority.co.uk/data-and-insights/insights-and-analysis/production-and-expenditure-projections/

NSTA (2026) *Process for Producing NSTA Production Projections* Available online at https://www.nstauthority.co.uk/media/vroij4ki/process-for-producing-nsta-production-projections-february-2026.pdf

OEUK (2026) *Business Outlook Report 2026*. Available online at https://oeuk.org.uk/product/business-outlook-report-2026/

Westwood Global Energy Group for OEUK (2025) *Potential of the UKCS under different scenarios – OEUK summary report.* Available online at: https://landing.westwoodenergy.com/hubfs/Westwood%20Insights/Westwood-OEUK-UKCS-Outlook-Summary-Report-June-2025.pdf?utm_campaign=166942916-Westwood%20Insights%20-%20Ungated%20Content&utm_source=2025-06-ukcs-geological-potential&utm_medium=weblink

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