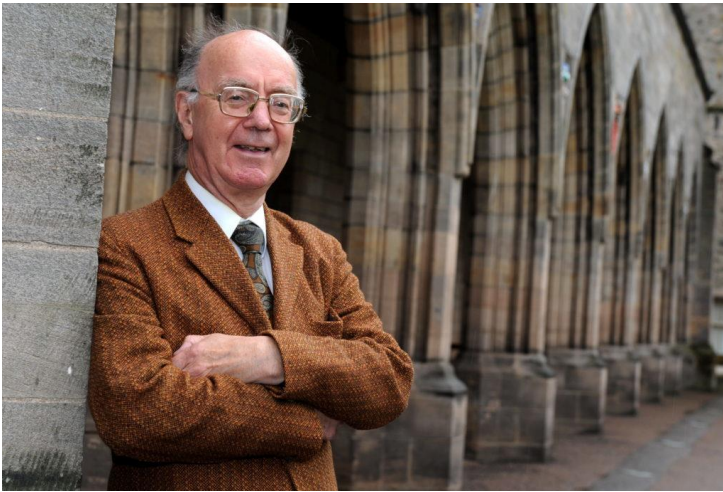


## Energy Voice – OPINION –

# Alex Kemp: North Sea set for more turbulent times in 2023

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Professor Alex Kemp of Aberdeen University

The year 2022 will go down as one of the most turbulent in the history of the UK Continental Shelf (UKCS).

The invasion of Ukraine in February led to a sharp increase in oil and gas prices. This was at the time when the global industry was just emerging from a period of relatively low prices, and correspondingly low new investment. Hence, the industry was unable to respond rapidly to the evolving situation of reduced supplies of both oil and gas from Russia.

Western Europe has been very reliant on gas from Russia, which has typically met around 40% of annual requirements. As a result, wholesale gas prices rose to unprecedented levels, reaching a record 600 pence per therm – the equivalent of around \$410 per barrel of oil equivalent (boe). The gas price has remained extremely volatile, reflecting every piece of new information on supplies from non-Russian sources and the extent to which gas storage facilities in Europe have been replenished.

Currently, storage levels stand at over 90% for the main consuming countries. As a consequence, the spot price has come down substantially. As the time of writing in mid-December, it is [around 340 pence per therm](#) (or around \$245 per boe).

While there has been some increase in other imports of gas to Western Europe, particularly in the form of LNG, this is by no means sufficient to match the major reduction in supplies from Russia in recent months. The traders, who have the major influence on market prices, are now concerned about supplies for the later months of 2023. Prices relating to year-ahead forward contracts are already reflecting the likelihood of tight supplies. It is assumed that even if the Ukraine-Russia war ends there will still be sanctions in place against Russia.

## Reducing reliance

Against this backdrop, the subject of fuel poverty has become increasingly important. Over 80% of homes in the UK are currently heated by gas and over 40% of electricity is generated from gas over the average 12-month period.

But, just as Russian gas supplies cannot be replaced in a short time due to the need for extensive investment in new facilities, so reliance on gas by individual consumers cannot be removed without substantial investment on their part. This will inevitably take some time even if substantial incentives and/or subsidies are provided.

Reserves of oil and gas in the UKCS remain substantial. The UK Government is keen to encourage investment in new fields of both oil and gas to reduce our major dependence on imports of both. However, before new field development approvals are agreed evidence of plans to reduce CO2 emissions in production operations must be provided.

In practice, this means reducing reliance on diesel and fuel gas to provide power in production operations. This can be **very expensive**. Hence uncertainty remains about the extent to which **new field developments will go ahead in 2023**.

The award of new exploration licences is also subject to proposals for the industry passing a checkpoint hurdle, which again emphasises the need to reduce emissions of CO2 and methane. It is likely that acreage being made available will concentrate on areas fairly close to existing infrastructure where the development costs and emissions are expected to be relatively low.

In practice this could mean that subsequent discoveries made would be relatively small. It is possible that there will also be emphasis on acreage in the Southern North Sea which is a generally low-cost area and where much-needed gas may be discovered.

## Windfall tax complexities

The investment climate has also been materially influenced by the introduction of the Energy Profits Levy (EPL) on 26th May 2022 and its **increase from January 2023** to 35% with termination in March 2028.

This greatly reduces industry cash flows from existing production operations – but the associated investment allowances are also very powerful. The net effect on new field investment thus depends on the extent to which operators already have income from other fields against which they can set the investment allowances. If the commitment was undertaken prior to 2022, the extra investment with the Levy would not be available and the tax at an overall rate of 75% would bite strongly.

On the other hand, a new investment undertaken during the period May 2022 – March 2028 would benefit from tax savings exceeding 91% of investment costs – provided that the company already had income in that period from other sources. This investor would also benefit from no EPL being paid on income after March 2028.

The effects of the Levy are thus complex. Myself and my colleague Arturo Regalado have undertaken detailed modelling on this subject, one finding of which is that the negative effects for small fields (which dominate the current prospects) could be substantial, especially in situations where an investor has insufficient income against which they can set their allowances.

When all the above factors are taken into account, the main conclusion is that the investment climate for 2023 remains volatile. Much depends on political developments both worldwide and in the UK, and any changes to exploration licensing, field development policy, and taxation will be of major importance.

Yet the industry is recovering from the repercussions of COVID which disrupted production operations. This means that 2023 should see some upturn in offshore activity, including employment, as has been indicated in a very informative **recent publication** from Offshore Energies UK.

Making forecasts for the UKCS in 2023 is subject to several major uncertainties, but some consolidation of overall activity can be predicted with some confidence.

The industry's ability to deal with a range of unprecedented developments has been tested considerably in recent years – and this can be expected to continue in 2023.