ABIS Energy

UKCS Investment Climate

May 2022

Introduction

UKCS investment climate - May 2022 perspective

The investment climate in the oil and gas sector worldwide has always been subject to uncertainty.

The UKCS remains a secure E&P Basin. Seventy-five percent of the UK primary energy needs is supplied by UKCS hydrocarbon production and processing.

Energy Security is high on the agenda for all developed economies, the Russia Ukraine war has exacerbated the underlying issues that have been ignored by successive governments of all stripes.

All of this has major implications for the energy investment climate in the UK. The reliance on imports, the high costs and risks associated, impact ongoing security of supply.

Professor Alex Kemp, the University of Aberdeen paper; **The changing Investment Climate in the UKCS: the 2022 Perspective,** addresses the issues.

ABIS Energy MD F J Kiernan, FIED, companion piece**: UKCS Short to Medium Review 2022,** explores current and pending UK Gov legislation and the likely conclusions.

The UK Gov Policy Paper, **Energy Security Strategy** emphasises the positive role that North Sea production can play in enhancing security of supply.

There are late life investments and new field developments which could proceed. The climate for these assets, investment for such developments, has mitigated.

Mature assets should benefit. The positive opportunities to the oil and gas supply chain, energy security, jobs and pricing could be substantial.

F J Kiernan

ABIS Energy

May 2022

The Changing Investment Climate in the UKCS: the 2022 Perspective

Professor Alex Kemp, University of Aberdeen

The investment climate in the oil and gas sector worldwide has always been subject to much uncertainty. A glance at the behaviour of oil prices since the modern industry emerged in 1859 reveals major fluctuations which were generally not well-predicted. Thus in 1980 the widespread view was that prices which had just soared to $40 would continue to increase. In the event they rapidly collapsed to a low of $10 in 1986.

Currently, the price risk remains high for both oil and gas. Over the last several years the successful development of shale oil in the U.S.A. led to that country substantially increasing its share of the world market. This greatly alarmed OPEC, but internal disagreement on how to react to this led to a major fall in price. In April 2020 a cohesive agreement involving major production cuts was implemented. This had credibility with the market traders and the price recovered from the dramatically low levels reached in March of that year. The gradual emergence of the world economy from the COVID-induced recession has increased oil demand. This, plus the broad adherence of OPEC to its production targets, resulted in the price increasing before the Russia-Ukraine war. This latter event along with the associated sanctions against Russia has precipitated a further major increase in the price to comfortably exceed $100 in early May. Some traders are reluctant to handle Russian oil in case they fall foul of sanctions. This increases the demand for non-Russian oil and pushes up the price. The ability of Russia to continue to sell its oil and the continuation of sanctions will have a major effect on price movements.

Recently the gas price has exhibited much greater price increases. This was already happening before the Russia-Ukraine war and was due principally to lack of investment in new field developments in recent years when prices were quite low. The very heavy reliance of Western Europe on gas from Russia has greatly increased prices following the war. The wholesale price in the UK has been extremely volatile, reaching a peak of 500 pence per therm on one occasion. In recent weeks it has fallen sharply to 160 pence per therm in early May. This may reflect the seasonal fall in demand but the outlook for late 2022 remains very uncertain, again depending on the progress of the war and the related sanctions. In Western Europe efforts are being made to acquire gas from non-Russian sources, but large volumes cannot readily be procured without substantial investments in new fields and in transportation and regasification facilities to handle LNG imports. All this also takes some time to implement.

But these are not the only factors affecting the outlook for oil and gas prices. The commitments made by many Governments, including the UK, to the Energy Transition and Net Zero require major reductions in the oil and gas consumption. Organisations such as the IEA have projected dramatic decreases with the consequence that future oil and gas prices would fall very substantially. The UK Government pays much attention to the consumption projections consistent with attaining Net Zero by 2050 prepared by the independent Committee on Climate Change.

These can usefully be compared with the estimates of production prepared by the North Sea Transition Authority (NSTA). The most recent projections are shown in Chart 1 for gas and Chart 2 for oil.

The UK is seen to be a large net importer throughout the period to 2050 with the dependence on imports being particularly noticeable for gas.

Chart 1

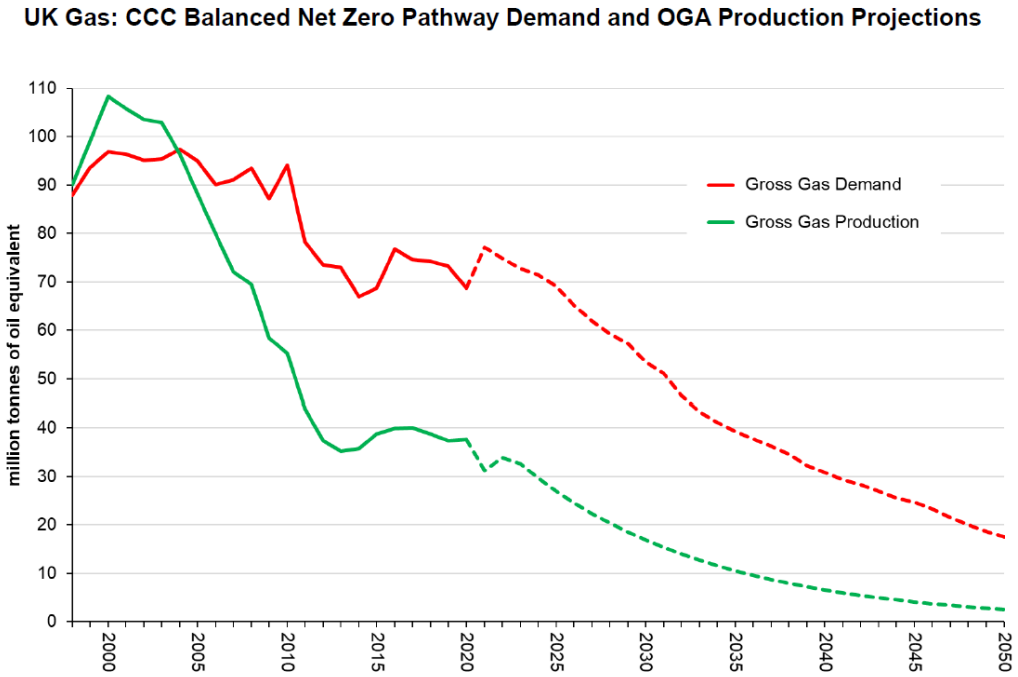
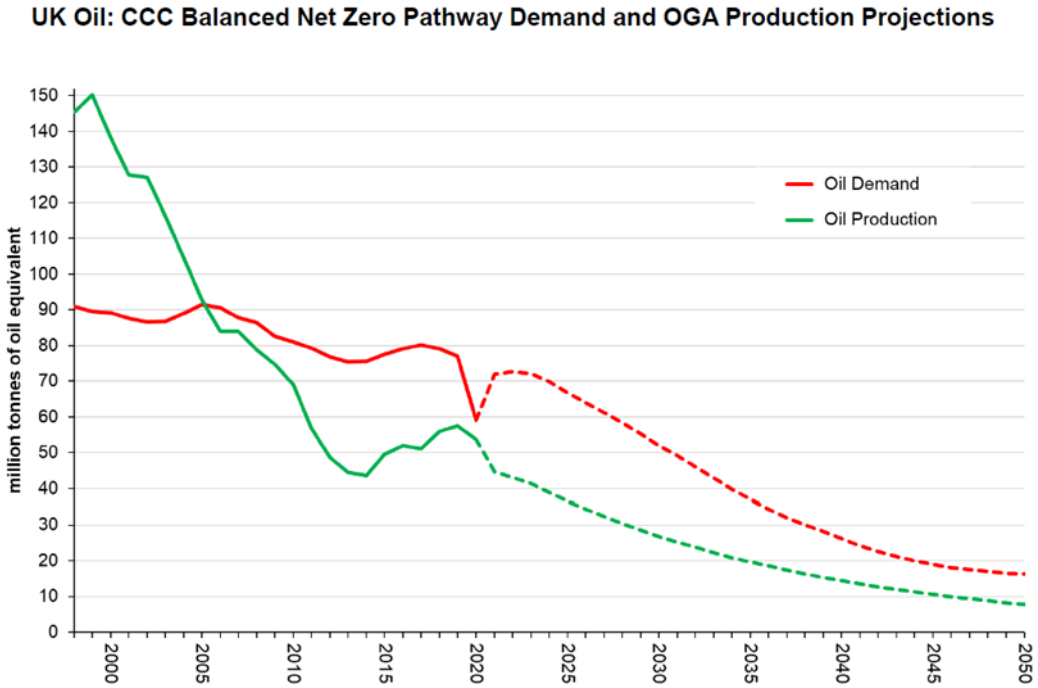


Chart 2



All this has major implications for the investment climate in the UK. The major reliance on imports against the background of the high costs and risks attached to them has given more prominence being given to security of supply. The recently published British Energy Security Strategy emphasises the positive role that North Sea production can play in enhancing security of supply.

Thus, further investment in producing facilities is to be encouraged. Currently there are a substantial numbers of late life investments and new field developments which could proceed. The present climate for these has turned positive for such developments. Mature assets should clearly benefit. The positive opportunities to the oil and gas supply chain, which has suffered greatly over the last few years, could be substantial. The contractor supply chain provides the majority of jobs in the UKCS. Further, tax payments to the Government would also be significantly enhanced during a period of relatively high prices. The North Sea tax system is progressive which means that when taxable income increases the payments to the Government take increase not only absolutely but also as a proportion of taxable income.

It should be emphasised, however, that caveats to the above need to be considered. Thus, the UK Government has put into effect a Climate Compatibility Checkpoint for Future Oil and Gas Licensing in the UKCS. Along with existing powers over field development approvals which NSTA and BEIS already possess, particularly through acceptable Environmental Impact Assessments, successful applications for new licences and new field development approvals will have to demonstrate substantial CO_2 emission reduction procedures compatible with the attainment of Net Zero by 2050. Such measures could, for example, be the electrification of power on installations rather than using diesel or fuel gas. The attainment of this, while passing the investment hurdle rates of investors for long-term projects, is not straightforward, such as with field in the West of Shetland region where other costs are also high. There is also a distinct possibility that effective CO_2 prices will become more prevalent and at higher cost over the longer term. Currently a substantial number of allowances are available free of charge, but this may well change in the future with more having to be bought.

At least some investors have already recognised these possibilities and are factoring them into their investment decision-making processes. Very recently Shell has published its Annual Report 2021. With respect to long-term investments the central oil price to be used for screening purposes is stated to be $60 in real terms throughout the period to 2050. For gas the corresponding figure for Henry Hub prices is $3 per MMBTU in real terms. (It should be noted that Henry Hub prices are well below those in the UK and EU).

In its Annual Report 2021 BP states that for investment appraisal purposes its central estimate for Brent is also $60 in real terms to 2030, $55 for 2040, and $45 for 2050, reflecting declining world consumption. For natural gas BP also uses a price of $3 per MMBTU at Henry Hub until 2040. BP also indicates the carbon price which it uses in investment appraisal at $50 per tonne to 2029, $100 in 2030, $200 in 2040, and $250 in 2050, all in real terms at 2020 prices.

Investors in long-term projects in the UKCS need to consider the risks as indicated above. Environmental issues relating to climate change are likely to become increasingly

important. Risks relating to security of supply will be important in the short- and medium-term. Domestic UK production has a comparative advantage over imports as the CO_2 emissions per therm delivered to customers is very likely to be greater with imports even when security of supply is reasonably assured.

Fuel poverty is likely to remain a major issue in the short- and medium-term and policies may impact on investors.

The risks of a windfall tax being levied on oil and gas producers have been reduced by recent UK Government statements but still remain. Investors have to demonstrate that they are being proactive in pursuing projects in the oil and gas sector, in renewables and CCS. Risk mitigation can also be accomplished through vertical integration from production to delivery to final consumers. There are well-known historic examples of some energy supply companies investing in upstream activities but subsequently disinvesting in the upstream sector. It is noteworthy that studies consistently find that vertically integrated oil and gas companies have lower weighted average costs of capital (WACC) compared to non-integrated companies.

****

UKCS

Short to Medium Term Review; May 2022. F J Kiernan MD ABIS Energy

UK Government Policy Documents

Department for Business Energy and Industrial Strategy. [BEIS]

- **North Sea Transition Deal;** March 2021.
- **Designing a Climate Compatibility Checkpoint for future Oil and Gas Licencing in the UK Continental Shelf**; Consultation Document, December 2021. Closing date 28th February 2022.

Document 1; North Sea Transition Deal

Energy Policy is reserved to HMG Westminster.

Energy Policy includes, Oil and Gas, Coal, Nuclear Energy, Electricity and Energy Efficiency.

While **OGUK** was party to the North Sea Transition Deal, **BEIS** is Government Agency responsible.

The deal is built about five outcomes:

- **Supply De-carbonisation**.
  - Industrial emission targets
  - Stewardship/Governance.
  - Monitoring and Reporting.
  - Action Plan.
  - Investment.
- **Carbon capture upgrade and storage**.
- **Hydrogen**.
- **Supply Chain Transformation**.
- **People and Skills**.

The **North Sea Transition Deal** is about transforming legacy business. The policy document describes the commitments and expectations for transactional de–carbonization.

It does not legislate Exploration & Development or transport systems and decommissioning.

Document 2; Defining compatibility checkpoint for future oil and gas licencing in the UK, Continental Shelf [UKCS]

This is a consultation document. Having set out the energy transition parameters for the legacy business, there needs to be a mechanism to apply the same metrics to FUTURE licences for exploration, development and production.

The UKCS from the start in 1967 was governed by legislation and governance with a requirement to **“Maximise Economic Recovery” [MER].**

This body of legislation needs to be modified and replaced with the metrics as set out in **the North Sea Transition Deal.** The HMG consulting document is the mechanism chosen to develop the revised licence rules.

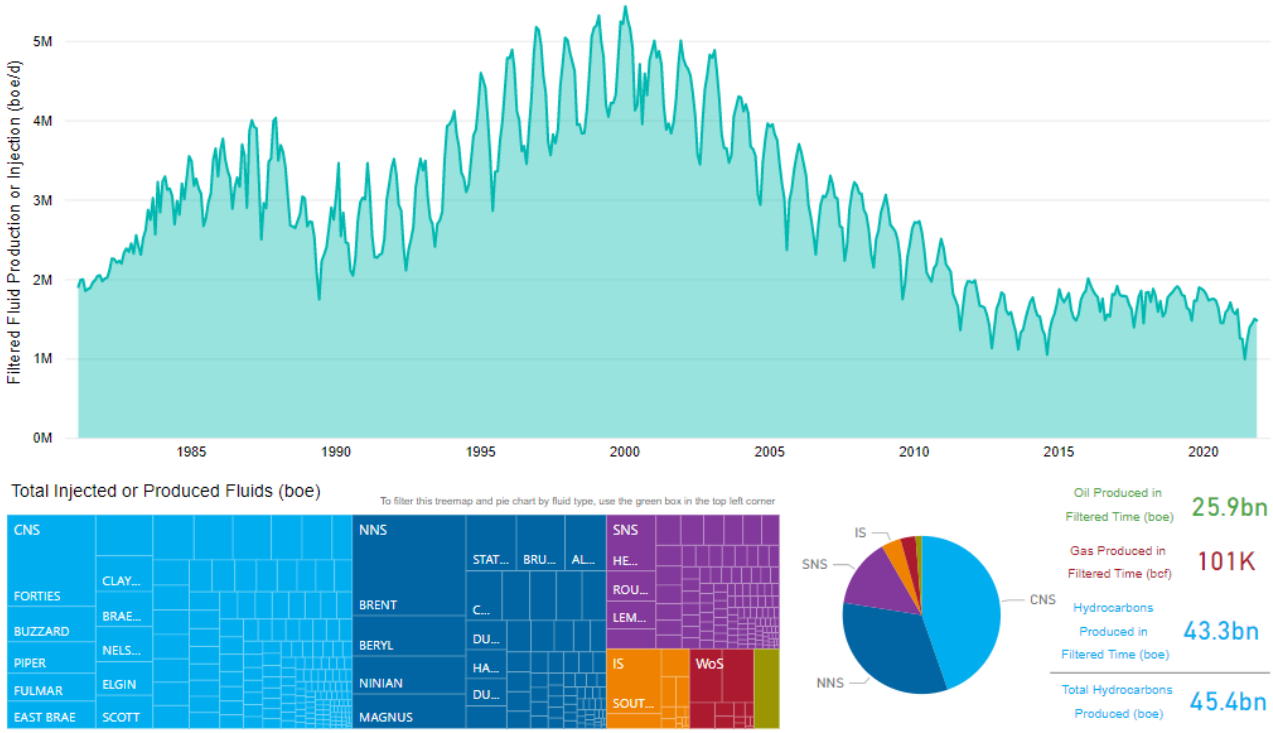
UKCS Production

UKCS produced just over 1m boepd oil in 2020.

Rystad Energy predicts that UKCS hydrocarbon production will reach a maximum of 1.7m boepd in 2035. This Is based on the current reserves inventory with no replacement.

The OGA estimates that there “is up to 10/20 billion of oil equivalent remaining in the UKCS”. Projections for the oil and gas demand, however produced, are forecast to continue for decades to come.

Domestic (UKCS) production of gas currently meets circa 46% of UK domestic demand. It is also the case that around 75% of the UK primary energy needs are currently supplied UKCS Oil and Gas. UKCS production will continue to be central to the nation’s energy supply.



Summary

- Name changes; OGA Changes to North Sea Transition Authority, OGUK to Offshore Energies UK
- Legacy production without replacement will peak in 2035 @ 1.7m bpoed.
- Legacy facilities are charged with "clean-up their act" as per **North Sea Transition Deal.**
- Legacy facilities having consent for future in-field developments proposed under an existing licence are not paused
- Upon the conclusion, "**Designing a climate compatibility checkpoint for future oil and gas licencing in the UK Continental Shelf**" consultation document end February 2022, the licensing process has resumed.

Conclusion

Energy Security Strategy emphasises the positive role that North Sea production can play in enhancing security of supply. Investment in producing facilities is to be encouraged. Currently there are late life investments and new field developments which could proceed. The present climate for these assets has turned positive for such developments. Overall Mature assets should benefit. The positive opportunities to the oil and gas supply chain could be substantial.

There is a 12/13-year operations and production window for the current and legacy Oil and Gas inventory that will continue to produce at circa 1.2m. to 1.7m bpoed without replacement.

Global demand will recover, UKCS crude oil, the bulk of which is exported, will remain a source of income for the Operators. This is likely to continue, worst case, the UKCS market will be stable for the next 10 years**.**

Russia Ukraine War

The associated sanctions against Russia have resulted in a further major increase in the oil price to comfortably exceed $100 in early May 2022. Traders are reluctant to handle Russian oil, this increases the demand for non-Russian oil and pushes up the price. The ability of Russia to continue to sell its oil & gas, the continuation of sanctions will have a major effect on price movements.

Recently, the gas price has exhibited similar volatility. This had already happened before the Russia-Ukraine war and was due principally to lack of investment in new field developments when prices were low. The disproportionate reliance of Western Europe on gas from Russia has significantly increased prices following the war. The wholesale price in the UK has been extremely volatile, reaching a peak of 500 pence per therm on one occasion. Recent weeks it has fallen sharply to 160 pence per therm, early May. This may reflect the seasonal fall in demand but, the outlook for late 2022 remains uncertain. Dependent as it is on the progress of the war and the related sanctions.

In Western Europe efforts are being made to acquire gas from non-Russian sources, however large volumes cannot readily be procured without substantial investment in new fields, in transportation and regasification facilities to process LNG imports.

This will take time to implement.

F J Kiernan

May 2022