

MAXIMISING THE UK'S OIL AND GAS RESOURCES: BACKGROUND

Security of energy supply is a key issue that has been considered by the Energy Review. Ensuring that UK's indigenous resources are used to their full potential plays an essential part in delivering this security, providing a reliable supply and reducing the need for imported oil and gas. This note sets out the background to the proposals put forward by the review for maximising the UK's oil and gas resources.

The benefits of maximising the UK's indigenous hydrocarbons resources go well beyond the additional wealth created, consequent tax revenues and contribution to the balance of payments. Significant indigenous production provides additional security to the UK's energy supply - not just in volume but also in terms of predictability and diversity. Moreover, a thriving industry at home provides support to the UK's oil and gas supply chain when competing for business throughout the world.

The UK has large indigenous oil and gas resources: estimates of the oil and gas remaining to be produced range from 21 to 27 billion barrels of oil equivalent - this compares with production of some 35 billion barrels of oil equivalent by the end of 2005. Evidence to the Review shows that, if estimates of the remaining geological potential are right and if investment in exploration and development can be maintained near current levels, then production in 2020 could be equivalent to a million barrels or more a day higher than if investment falls away (split roughly equally between oil and gas production).

Clearly, nothing can be done to change the underlying geology or the path of oil and gas prices, both of which are fundamental to ultimate recovery. But the Review has identified three key factors that will improve the attractiveness of investment in the UK in comparison to other regions of the world. These factors impact directly on improving the commercial and engineering efficiency with which discoveries and developments are exploited and the effectiveness of exploration strategies to find new fields.

1. Maximising recovery

The DTI's Stewardship Initiative was launched in 2005 and is designed to ensure that investment in producing fields is maximised by focusing on the poorest performing fields as defined by an annual survey against benchmarks. The initiative seeks to work collaboratively with the owners of mature fields but has the support of licence powers should these be necessary. Work in preparation for the initiative had indicated that an additional 2 billion barrels of oil equivalent could be recovered if all mature fields received the investment that would allow them to reach their full potential.

In the course of the first cycle of this initiative it became apparent that there is a particularly wide variation in the levels of production reliability across the 300 or so fields surveyed. Low reliability harms ultimate recovery by reducing production rates. It also reduces the overall security of energy supply to the UK. In parallel, recent work on the factors that would contribute to a high level of successful exploration has highlighted the need for the owners of producing fields to work more closely with the licensees of nearby exploration acreage. If this is done rigorously, the mutual benefits of "tying back" local discoveries to existing platforms and pipelines (reduced development costs for the developer, higher throughput for the infrastructure owner) can be realised. **To deliver this benefit, the DTI's Stewardship process will immediately focus on local exploration potential and on field reliability to deliver improved performance by June 2007.**

For the past 40 years the continued exploitation of the UK's oil and gas resource has depended on the development of technology to meet the challenges of the basin, allowing ever-more elusive exploration targets to be drilled and produced. Much of this technology has been developed in the UK and has formed the basis for a world class oil and gas service industry. Over the past decade, the make-up of operators on the UK continental shelf has shifted from a few large multi-national companies to include a more diverse pool of smaller to medium sized operators less able to develop the new technologies required to exploit the opportunities in the basin. **It is essential that the technology needed to maximise recovery (in both existing fields and from new exploration) is developed. The DTI will work proactively and with the industry to ensure that the technology needed to maximise the basin's recovery continues to be developed.**

2. A focus on developing infrastructure to the west of Shetland

Estimates of potential recoverable reserves to the West of Shetland based on data derived from drilled prospects are between 3 and 4 billion barrels with a further estimate of exploration potential in excess of a billion barrels. However, the provision of infrastructure, particularly gas transportation pipelines, in the area is not well developed. This is inhibiting the development of several existing gas fields and reducing the attractiveness of further exploration. With the recent discovery of further hydrocarbons and the active consideration of developments, there exists an opportunity to establish the spine of a substantial gas infrastructure to stimulate further activity and improve security of supply. **The DTI will lead a taskforce of licensees to report the Energy Minister by the end of the year on whether a gas export route for the area could be established and the means by which it could be delivered.**

3. Developing a commercial framework that supports a dynamic industry

The current commercial practice in the UK's oil and gas industry has grown out of the experience of 40 years of activity. Over the majority of that time the activities being supported have changed slowly but, more recently, there has been a much more rapid change in the nature of the business. Examples of change are: there is now much more need for co-operation between licence groups as more, and generally smaller, fields turn to existing infrastructure to aid development; the pressure to reduce "fallow" assets has led to the need for more rapid turnover in licence ownership; in many cases, there is much more rigorous prioritisation of expenditure on a global basis making unattractive projects that have uncertain value or uncertain delivery schedules.

Looking to the future, it is clear that the nature of activity will continue to call for more rapid and flexible commercial support than in the past. In response to this need, PILOT (the joint Industry-Government forum chaired by the Energy Minister) has already sponsored two codes of practice – the Commercial Code (CCoP) and the Infrastructure Code (ICoP) – to speed up and reduce the costs of doing deals. While progress is being made and there are many examples emerging of excellent, mutually beneficial, practices it is clear from both the latest periodic reviews of these Codes and from responses to the Energy Review that more needs to be done to ensure that commercial activities - negotiations, transactions and behaviours - support the need of the basin routinely to deliver efficient exploration and development. **Through PILOT the Energy Minister will ask the Industry's leadership to report on how commercial practice can be further improved to cut delay and improve effective deals (including by increasing the cost of non-compliance with the Codes) and to implement their ideas by the Spring of 2007.**