

## OIL & GAS ECONOMIC UPDATE

MARCH 2004

### Overview

The oil & gas sector includes fabrication, extraction and servicing activities. The industry previously employed over 5,000 people at construction yards in the Highlands and Islands, incorporating substantial manufacturing, electrical and engineering activity. However, industry shift has led to a decline in contracts and the closure of fabrication yards. Future oil & gas opportunities exist, but different attitudes, business models and technologies have to be deployed. The current importance of the sector to the Highlands and Islands economy is summarised below:-

#### *Employment*

- The extraction and distribution of oil & gas, and manufacture of petroleum products supports 579 FTE's in the Highlands and Islands<sup>1</sup>, predominantly in Orkney (Flotta) and Shetland (Sullom Voe)<sup>2</sup>.
- Some 2,478 people were on the HIE Oil Placement Scheme (HIE-OPS) database of redundant oil fabrication workers in 2003<sup>3</sup>. Approximately 73% had found work, the majority on short-term contracts. Up to 1,000 individuals worked abroad, predominantly in The Netherlands<sup>4</sup>.
- Approximately 21,200 people are employed offshore on the UK Continental Shelf (UKCS)<sup>5</sup>.
- Average full-time weekly earnings in oil & gas, chemicals and petroleum activities in Great Britain are £495, higher than the all industry average<sup>6</sup>.

#### *Units/Businesses*

- The North of Scotland Industries Group (NSIG), a grouping of companies involved in oil & gas sub-contracting and related industries, has 27 member companies<sup>7</sup>.
- The KBR Caledonia Ltd (Halliburton) Nigg fabrication yard is open on a care and maintenance basis<sup>2</sup>.

#### *Output*

- UKCS and UK landward crude oil production peaked in 1999, averaging 2.65 million barrels per day, but production has declined since, averaging 2.25 million barrels per day in 2002<sup>8</sup>.
- Natural gas production (both onshore and offshore) peaked in 1999, reaching 7.34 trillion cubic feet. Natural gas production in 2002 was 6.37 trillion cubic feet<sup>7</sup>.
- Annual offshore oil & gas spend on the UKCS remains at £7 - £8 billion p.a.<sup>9</sup>.
- Total output at basic prices for oil & gas extraction and servicing activities in Scotland is £12,958 million<sup>10</sup>.
- GVA at basic prices for oil & gas extraction and servicing activities in Scotland is £9,474 million<sup>10</sup>.

#### *Product Markets*

- The DTI is using initiatives such as Promote UK to drive forward the exploration and development of new fields and strengthen the demand for UK oil and gas supply chain services<sup>9</sup>.
- The transfer of offshore oil & gas assets from large companies to new independent operators is providing a fresh approach to the efficient management and longevity of these fields<sup>9</sup>.
- The inspection, repair and maintenance (IRM), subsea market and demand for pipe spooling will remain active until oil and gas production in the North Sea ceases (20-30 years)<sup>2</sup>.
- Major decommissioning opportunities will arise as early North Sea platforms cease operation<sup>2</sup>.

#### *Workforce/Skills*

- The industry is male-dominated and has a larger proportion of full-time workers than other sectors<sup>1</sup>.
- Workers need to adapt to different projects and take responsibility for updating their skill sets<sup>2</sup>.

<sup>1</sup> Source: ABI 2002 pending revision (NOMIS)

<sup>2</sup> Source: Growing Businesses Group 2004 (HIE)

<sup>3</sup> Source: HIE Oil Placement Scheme Database Update 2003 (Global Highland/HIE)

<sup>4</sup> Source: Oil Placement Scheme Evaluation 2002 (HIE)

<sup>5</sup> Source: Economic Report 2002 (UK Offshore Operators Association)

<sup>6</sup> Source: Futureskills Scotland Sector Profile: Oil & Gas, Chemicals & Petroleum 2002

Note 1 – Earnings data taken from New Earnings Survey 2001 (ONS)

<sup>7</sup> Source: North of Scotland Industries Group 2004

<sup>8</sup> Source: Supplied to DTI by field operator through PPRS 2004

<sup>9</sup> Source: Oil & Gas Industry Development DTI 2004

<sup>10</sup> Source: Scottish Annual Business Statistics: Scotland by Division 2001 (Scottish Executive & ONS)

Note 1 – Based on ABI employment data which excludes self-employed

## SWOT Analysis

The following analysis illustrates the main issues facing the development of the oil & gas sector in the Highlands and Islands.

<b>Strengths</b>	<b>Weaknesses</b>
<p><b>Active industry associations</b></p> <ul style="list-style-type: none"> <li>- The NSIG focuses on attempting to reduce dependence on the oil industry, assisting the pursuit of new business opportunities</li> <li>- DTI base in the area ensures awareness of local issues and link to UK national policies</li> </ul> <p><b>Existing resource base</b></p> <ul style="list-style-type: none"> <li>- Local facilities are versatile and well placed to compete in the North Sea area, eg, Nigg - the largest dry dock in Europe</li> <li>- A wide range of manufacturing, engineering, construction and service businesses supporting the sector are located across the Highlands and Islands</li> <li>- A highly skilled and trained workforce with experience in the fabrication industry and a high degree of transferable skills</li> </ul> <p><b>Value of employment</b></p> <ul style="list-style-type: none"> <li>- Jobs created through oil &amp; gas are well-paid compared to average earnings in other sectors</li> </ul>	<p><b>Finite supply of indigenous oil &amp; gas</b></p> <ul style="list-style-type: none"> <li>- Production has already peaked and is now slowly declining</li> <li>- The UK will become a net importer of gas c. 2006. (Import contract secured with Norway to partly redress this situation and enable the UK to remain competitive)</li> </ul> <p><b>Lack of innovation</b></p> <ul style="list-style-type: none"> <li>- No R&amp;D facility in Highlands and Islands.</li> <li>- No emerging technologies</li> </ul> <p><b>Frictional unemployment</b></p> <ul style="list-style-type: none"> <li>- Due to the contractual nature of work, there is often frictional unemployment</li> </ul> <p><b>No tendering</b></p> <ul style="list-style-type: none"> <li>- KBR Caledonia Limited (Halliburton) at Nigg no longer bids for oil fabrication contracts</li> </ul> <p><b>Supply chain not visible</b></p> <ul style="list-style-type: none"> <li>- In an increasingly global market, effort must be made to keep the remaining oil &amp; gas supply chain in the Highlands &amp; Islands visible</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<p><b>Slowdown of decline</b></p> <ul style="list-style-type: none"> <li>- Development of small fields and extension to the life of existing fields will develop the demand for fabrication of modular systems</li> </ul> <p><b>Alternative uses of existing facilities</b></p> <ul style="list-style-type: none"> <li>- Fabrication facilities could be used for alternative purposes, including material handling, ship building &amp; inspection, repair and maintenance</li> </ul> <p><b>Oil-related decommissioning</b></p> <ul style="list-style-type: none"> <li>- The value of decommissioning installations is estimated at several £billion (UK), with local facilities strategically placed to compete</li> </ul> <p><b>Geographical diversification</b></p> <ul style="list-style-type: none"> <li>- Firms can use expertise gained in the UK market to expand into new markets in Europe and overseas</li> </ul> <p><b>Diversification into other sectors</b></p> <ul style="list-style-type: none"> <li>- Nuclear decommissioning is worth several £billion and will offer the opportunity to transfer skills into an emerging industry</li> <li>- Offshore wind &amp; marine power are growing sectors and provide new business opportunities (underpinned by the Renewables Obligation)</li> </ul>	<p><b>Intensifying global competition</b></p> <ul style="list-style-type: none"> <li>- Local products less competitive due to strong pound and lower production costs overseas</li> <li>- Port facilities in Norway, The Netherlands and the Far East are increasingly dominating the market by winning the majority of contracts</li> </ul> <p><b>Lack of local market control</b></p> <ul style="list-style-type: none"> <li>- Overseas companies account for a large quantity of sales from manufacturing and production companies, making local businesses vulnerable to external factors</li> </ul> <p><b>Lack of North Sea discoveries</b></p> <ul style="list-style-type: none"> <li>- If no further discoveries are made then Sullom Voe output/throughput will decline at about - 10% per year and the output could cease entirely between 2012-17, despite production from the Clair field</li> </ul>

## Priorities for Action

Factors identified for positive development of the oil & gas sector in the Highlands and Islands include the following:-

- Improvements in the competitiveness and productivity of the local industry supply chain
- The identification of new business opportunities in domestic and global markets
- Collaboration to promote and support initiatives that address skills gaps and shortages
- Further consideration of how the unique assets of ports and sites in the Inner Moray Firth could be utilised to provide new economic activity