

Oil & Gas diversification opportunities:

Oil & Gas Decommissioning



Oil and gas decommissioning is a relatively new market with a new set of challenges and priorities. There are strong synergies with oil and gas exploration, development and production, but also key differences. There is a need to significantly reduce costs, which will require a different mindset and approach, while maintaining safe, efficient and effective working practices. The decommissioning of UK fields presents the most accessible contract opportunities for Scottish companies, estimated to be worth £17.6bn between 2016 and 2025.

Key Facts:

- The cost of decommissioning UK oil and gas assets is estimated at £50bn over 40 years to 2055.
- UK decommissioning expenditure is forecast to grow steadily, rising from £1.1bn in 2015 to £2bn in 2017.
- Well plugging and abandonment is forecast to account for 47% of the estimated £17.6bn spend across the UK Continental Shelf between 2016 and 2025.
- Between 2016 and 2025, more than 100 platforms are forecast for removal or partial removal from the UK and Norwegian Continental Shelves. Over 1,800 wells are forecast for plugging and abandonment, and approximately 7,500km of pipelines are lined up for decommissioning.
- The Norwegian Petroleum Directorate estimates that £1bn per year will be spent decommissioning Norwegian fields to 2020.
- Major decommissioning activity is planned for fields in the Gulf of Mexico, Malaysia and Indonesia.

UK Opportunities

Oil and gas decommissioning presents significant opportunities for the Scottish oil and gas supply chain to develop products, services and expertise that can be exported worldwide. The most readily accessible opportunities for Scottish companies are on the UK Continental Shelf, where annual expenditure is expected to exceed £1.5bn between 2016 and 2024. The Norwegian decommissioning market is predicted to rise to £1bn each year to 2020.

International Opportunities

The Gulf of Mexico is one of the world's most active decommissioning markets, where annual expenditure has regularly exceeded \$1.5bn in recent years. Activity has largely focussed on shallow water projects, but deepwater decommissioning is expected to become increasingly prevalent by the end of the decade and into the 2020s. Asia Pacific represents a relatively new, longer-term market forecast to be worth between \$30bn and \$60bn, and largely concentrated in Malaysian and Indonesian waters.

Decommissioning Phase	Skills & Expertise Required
Planning & Preparation	Much of the planning and forecasting activity is undertaken in-house by asset operators, however, technical, societal, environmental, and other studies are often contracted out.
Well Plugging & Abandonment	Well P&A is the most costly and challenging decommissioning phase. Strengths and capabilities in the well servicing market could be transferred and applied to well P&A.
Cleaning & Decommissioning	This phase is focused on making assets safe and requires companies with experience in purging, cleaning & treating, waste disposal, waste accounting and cutting & lifting.
Disconnection	Involves the cutting and separating elements of an asset in preparation for its removal and transfer to shore. This requires companies with expertise in the cutting, flushing and cleaning of export pipe work.
Removal	Requires capabilities in project management, heavy lift, engineering and structural analysis. There is a specific requirement to develop new, more effective asset removal methods.
Disposal	Disposal comprises the waste management, deconstruction and reuse, recycling or disposal of assets once brought onshore. The reuse market presents a particular opportunity for development.
Continuing Liability	Continuing Liability involves the monitoring of a decommissioned field to ensure that it is safe and compliant with regulations. There may be an opportunity to provide packaged services comprising monitoring, assessment and logistics to address a current gap in market provision.

Market Entry

The decommissioning market present relatively few barriers to entry for companies already involved in the oil and gas supply chain; however, lack of visibility of the decommissioning pipeline, the prospect of delays due to the economic climate, and the difficulties in forecasting decommissioning costs may all prove challenging to new market entrants, who should consider:

- Exploring opportunities through early engagement with operators and attendance at decommissioning events;
- Decommissioning does not generate revenue for operators and owners of offshore assets, therefore, innovative approaches and solutions will be required to minimise costs;
- Partnering with firms already active in oil and gas decommissioning; and
- Pursuing opportunities at the planning, execution and late life phases of decommissioning so as to ensure continuity of work.

Further Information & Support

Scottish Enterprise has developed a range of services to help oil and gas companies become more innovative, increase efficiency and explore new market opportunities. Further information is available from: www.scottish-enterprise.com/industry-support/oil-and-gas

Additional information on decommissioning opportunities is available from:

- Decom North Sea:
www.decomnorthsea.com
- Oil & Gas UK:
www.oilandgasuk.co.uk
- Subsea UK:
www.subseauk.com