

# Oil & Gas diversification opportunities:

## Nuclear Decommissioning



Nuclear decommissioning is a growth industry that presents readily accessible opportunities to companies in the Scottish oil and gas supply chain. The UK spends £2-3bn per annum on nuclear decommissioning activities and is forecast to spend £117bn over a 100+ year period to fully decommission its existing nuclear sites.

### Key Facts:

- The Scottish nuclear decommissioning market is forecast to be worth £3.5bn over 15 years to 2030.
- Since 2010, more than £150m per year has been spent on decommissioning works at the Dounreay site in Scotland.
- The UK has one of the largest fleets of retired nuclear reactors in Europe, comprising 29 commercial and prototype reactors and 17 nuclear sites.
- The UK Government has committed £11bn of funding to nuclear decommissioning between 2016 and 2020.
- The nuclear decommissioning market is concentrated in Europe, which has 89 retired reactors and a further 40-50 earmarked for closure by 2025.
- The value of European decommissioning projects is estimated to reach £197.5bn by 2050.

## UK Opportunities

The UK nuclear decommissioning market presents sizeable opportunities for the Scottish oil and gas supply chain across a breadth of disciplines that includes civil engineering, demolition, fabrication, waste management, engineering design and project management. The decommissioning of the Dounreay site in Scotland generates regular contract opportunities; the company responsible for managing its cleanup, Dounreay Site Restoration Ltd, issued 124 contracts worth £139m in 2015/16. Across the UK as a whole, £1.75bn was spent on nuclear decommissioning contracts in 2013/14.

## International Opportunities

Europe is one of the most active regions in nuclear decommissioning, predicted to account for 69% of the global market to 2030. Germany is one of the largest European markets next to the UK, with 16 reactors at various stages of decommissioning, a further 9 in shutdown mode, and plans to close the remaining 8 by 2022. France has 13 reactors in various stages of decommissioning and the second biggest fleet of operational reactors in the world behind the US. The US, Japan and Russia also have large decommissioning markets that may present opportunities for technology exports but are less accessible to service-based companies.

Discipline	Skills & Expertise Required
Electrical & Mechanical Engineering	Comprising design in all disciplines including remote handling and electro / hydraulic / mechanical equipment.
Fabrication	Including high integrity waste containers, vessels and pipe work.
Plant	Including the supply of cranes and lifting equipment.
Inspection	Including the supply of remotely operated vehicles for both dry and wet area such as storage ponds.
Health & Safety	Including safety assessment.
Waste Management	Including waste and scrap recycling.

## Market Entry

Nuclear decommissioning is a highly regulated industry that requires suppliers to have high standards for health, safety and environmental management, quality management and security. As a minimum, suppliers need to demonstrate that they have suitably qualified and experienced personnel and compliant equipment and materials for any given contract. New market entrants should consider:

- Reviewing the guidance on security clearance and quality standards published by the Nuclear Decommissioning Authority;
- Reviewing the supply chain plans published by the six UK Site Licence Companies, which set out forthcoming contract opportunities at the UK's decommissioning sites;
- Attending nuclear decommissioning supply chain events, meet the buyer events and conferences;
- Partnering with supply chain firms already active across the oil and gas and nuclear sectors; and
- Participating in Scottish Enterprise's Nuclear Supply Chain project to learn more about decommissioning opportunities specific to their business.

## Further Information & Support

Scottish Enterprise (SE) has developed a range of information and support to help companies considering opportunities in nuclear decommissioning. This includes a guide to nuclear supply chain support, a guide to nuclear skills support, and several case studies of companies that have successfully entered the market. SE's nuclear supply chain project comprises industry workshops and meet the buyer events, as well as free one-to-one consultancy support from technical and/or commercial experts. Further information is available from: **[www.scottish-enterprise.com/nuclear](http://www.scottish-enterprise.com/nuclear)**

Additional information on nuclear decommissioning opportunities is available from:

- The Nuclear Industry Association:  
**[www.nuclearsupplychain.com](http://www.nuclearsupplychain.com)**
- Dounreay Site Restoration:  
**[www.dounreay.com/suppliers](http://www.dounreay.com/suppliers)**
- Sellafield: **[suppliers.sellafieldsites.com](http://suppliers.sellafieldsites.com)**