



EIC INSIGHT REPORT: NUCLEAR DECOMMISSIONING

MARKET FOCUS: GERMANY

Executive summary

Europe is at a crossroads with nuclear power. While some nations have ambitious plans to construct a new generation of plants, the UK currently proposing the largest, others are moving away from nuclear power sighting concerns about safety, decreased profitability and shifts towards renewables and decentralised energy generation. As a result, and also due to a substantial number of ageing reactors, the International Atomic Energy Agency predicts that approximately 200 of the 445 reactors currently operational worldwide will be retired by 2040 at a cost of more than US\$100bn. In Europe, 50 of the 129 reactors currently in operation will be shut down by 2025. This has led to the emergence of a buoyant global market in nuclear decommissioning as countries begin to make preparations to shut down reactors.

One country that has taken decisive action to move away from nuclear power is Germany. In 2011, after the Fukushima incident, the country decided to completely phase-out nuclear power by 2022. Seventeen nuclear power reactors will now

be decommissioned across the country, marking the beginning of the end of five decades of nuclear power generation in the country.

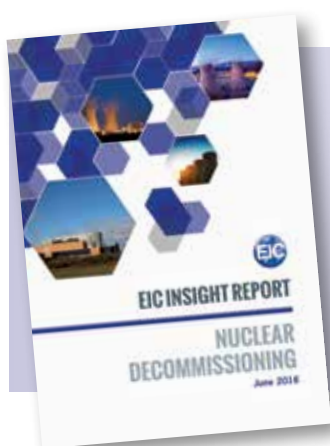
All reactors that began operation in 1980 or earlier were shut down following a safety inspection after the incident in Japan, leaving only eight reactors operating in 2016, all of which will be gradually phased-out by the end of 2022. It is predicted that the cost of decommissioning the 17 reactors will reach around €38bn, with the scale of work meaning that decommissioning will last into the second half of this century.

The logistics of pulling the plug on what was until recently one of the country's primary sources of power are proving an immense challenge. Legal hurdles, decommissioning technicalities and above all the questions of where to store the radioactive waste and who will pay for it all, are the main issues at hand.

While the German nuclear industry itself has decommissioned nuclear power plants in the past, the country has never had this volume of work to contend with simultaneously. The country has formerly decommissioned small,

experimental research reactors but has yet to tackle its larger, more complex commercial reactors. Given the number of reactors to come offline in a relatively small timeframe, the country will need assistance from outside companies if it is to succeed in decommissioning its fleet of nuclear power plants.

British firms are in a prime position to assist in decommissioning work due to the substantial experience gained at sites such as Sellafield and the various Magnox facilities in the UK. Opportunities in Germany are to be found across the supply chain from the larger Tier 1 and 2 contractors, down to small and medium sized enterprises. Work includes large component removal projects, reactor vessel segmentation and packaging, waste handling centres and site clearance, with further niche opportunities in supplying remote technologies and monitoring services. A key factor in ensuring successful decommissioning will be the planning and project management of projects, and given the experience in the UK, there is significant scope for project management companies to transfer their services to the German market.



Get the complete Insight Report

EIC members can download the full report via EICDataStream (eicdatastream.the-eic.com/reports/insightReports)

Non-EIC members can purchase a copy of the report by contacting:
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OTHER RECOMMENDED INFORMATION AND INSIGHTS

To complement this report, we've suggested related content that will give you a fuller picture of the nuclear industry as a whole.

Our events allow you to stay informed and connect with key players in the sector, while our Fundamentals of Nuclear course provides an overview of the industry from a scientific and commercial perspective.



Insight Reports

Nuclear New Build (November 2015)

This report provides an overview of global nuclear new build power projects, primarily in the UK while also looking at regions where nuclear power is growing. It highlights the major operators and contractors involved in the sector and where new build opportunities will be in the future.

eicdatastream.the-eic.com/reports/insightReports

Nuclear Decommissioning (March 2015)

The UK's nuclear decommissioning activity and forthcoming opportunities in the sector are the main focus of this report. It also examines the global state of the market and in particular nuclear decommissioning in Japan.

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Events

EIC Connect Power & Renewables 2017

28–29 November 2017, ACC Liverpool, UK

EIC Connect Power & Renewables assesses opportunities in the power, nuclear and renewables sectors. UK supply chain companies will be able to meet with operators and contractors active in these areas and find out about global contracting opportunities.

www.the-eic.com/EICConnect

World Nuclear Exhibition

26–28 June 2018, Le Bourget, Paris, France

As the leading event for the global nuclear energy sector, WNE will see companies working in the nuclear industry showcase their products and services. The programme will include keynote speeches from ministers, governmental representatives, CEOs and renowned international experts. The EIC will host the UK pavilion.

www.world-nuclear-exhibition.com



Training

The Fundamentals of Nuclear

23 February 2017, the EIC, London, UK

Run by the National Skills Academy Nuclear, this course looks at nuclear science, the effects of radiation, nuclear safety and its relevance to the supply chain. It also considers the current UK market, future markets, new build projects, existing facilities and decommissioning.

www.the-eic.com/Training

