

**FULL CIRCLE:
DECOMMISSIONING
IN THE ENERGY SECTOR.
AN ANNUAL REPORT.**

In partnership with

empirisys

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Introduction

WELCOME

Callum and I lead Decom Mission on behalf of our members and the industry in general, as we work to ensure that opportunities and challenges in decommissioning within the energy sector are rightly tabled and tackled.

Working with our colleagues in the Executive Team and supported by both the Decommissioning Leadership Group and the Board of Directors, we aim to increase awareness, connectivity and effectiveness for operators, asset owners, service providers and regulators alike, whilst maintaining our independence as a not-for-profit trade association.

This is the first ever annual report to be published by the organisation and it feels as if there was never a better time to be recording and reporting on status quo and direction of travel. The Energy Transition continues to accelerate, whilst the energy infrastructure of the 20th century becomes ever increasingly aged and expensive to maintain.

The balance of capital - both economic and technical - between greenfield, brownfield and decommissioning is as tight as it has ever been, meanwhile the factors that drive decommissioning activity are also subject to split demands. Taxation, decarbonisation and demographics create uncertainty that we try to unpick through events, briefings, workshops and networking.

Beneath this lie activities that create both jobs and wealth in the oil and gas, nuclear and renewable sectors and help protect persons and the environment. It is important to remember that these are key objectives no matter what the state of the market.

Within this report you will find the results of our stakeholder survey, compiled on our behalf by Empirisys. As ever, the real insights lie in the detail, but headline observations will not surprise seasoned professionals. We lack absolute clarity on future activity, people are a tight resource,

there is a need to improve training and awareness, and there remains a sense that (the collective) we could all be doing this better.

We also offer brief insights as to how we operate Decom Mission and our reach whilst highlighting the service of a small number of members that we engaged with under our Deep Dive model in 2023.

We trust that you find this information useful. Feel free to contact either of us should you wish to talk further.

Sam Long Chief Executive Officer
Callum Falconer Operations Director



BOARD COMMENTARY

As the respective Chair and Vice Chair of Decom Mission, we are pleased to be able to offer our own comments in this, the inaugural Decom Mission Annual Report.



Jinda Nelson
Chair, PDi Limited

Much has changed since the inception of Decom North Sea in 2009, but the added impetus of the Energy Transition means that the environment in which the organisation operates and the topics that it addresses are very different from that point in time.

Decommissioning is now seen as a core element of the broader trend towards decarbonisation in energy production and an inevitable consequence of the age of existing assets, be they offshore or onshore.

Through recent years, the Board has instigated a change in management and supported the new Executive Team as it has reinvigorated and rebranded the organisation.

With a strategy to expand reach and adapt to new challenges, we believe the organisation and its deliverables continue to represent good value and positive outcomes for members. Revenue continues to be derived primarily from membership and events, and ongoing improvements to business activity by the Executive Team are increasing efficiency and effectiveness.

2023 saw a number of changes in the membership of the Board of Directors and we owe thanks to those who stood down for their service, and to those who have joined us to help shape our future.

One of the key attributes of Decom Mission has been its independence and its ability to signpost future developments. It is the role of the Board, together with the Decommissioning Leadership Group, to ensure that the right balance is struck between lobbying for change where required, representing members' needs and ensuring best outcomes for industry and the environment. We remain convinced that the renewed organisation is meeting these and future obligations.

And so we welcome you to our inaugural Annual Report, which includes data drawn from the first survey of decommissioning industry stakeholders to be undertaken. This piece of work, directed and managed by our partners at Empirisys, highlights both the challenges and opportunities for us all.

The Board looks forward to working with the Executive Team and the members to respond to these findings in 2024 and beyond.



Calum Crighton
Vice Chair, Gilson Gray LLP

DECOMMISSIONING LEADERSHIP GROUP

The DLG is hand picked from representatives of member companies. We aim to cross the entire spectrum of membership and collectively have hundreds of years of decommissioning experience.

The DLG and supporting Special Interest Groups tackle specific projects to help set and share best practice, give direction to Decom Mission and improve market awareness and technical understanding between members.

Leadership

The DLG is currently chaired by Graham Dallas. Graham has been involved in multiple aspects of decommissioning for the last 15 years, mainly engaged in the commercial and planning aspects of a variety of decom projects, from well abandonment to topsides removal, and everything in between.

Graham sits as a Director on the Decom Mission Board and also holds a Director position with two other not-for-profit organisations. He is passionate about encouraging the next generation to consider STEM careers, energy, and decommissioning.

Co-chair is Elizabeth McAlpine. Elizabeth is an expert organiser and leader with a specialism in, and passion for, late life and decommissioning. With 16 years' experience in the sector she brings a strong technical background with an advocacy to drive change with cost effective approaches to decom projects.

She is also an industry champion for Diversity and Inclusion and will challenge the "norm", encourage participation, and ensure everyone has a voice. Elizabeth participates in multiple not-for-profit organisations.

Special Interest Groups

Four Special Interest Groups (SIGs) are currently in place:

- Health, Environment and Safety
- People
- Diversification
- Future Focus

HES and People tackle common challenges that are seen across the entire energy industry. Decommissioning often poses unique challenges and these SIGs are key to raising awareness as well as deriving solutions

Diversification looks to expand Decom Mission's remit into newer areas of the energy industry, including offshore renewables and nuclear. As a proportion of our membership already engages in these arenas, and many would like to, we focus on the needs and wants of the membership.

Future Focus looks at the future opportunities for Decom Mission as an organisation; where do we fit in? How do we best dovetail with other industry bodies and professional societies to enhance rather than duplicate effort?

A new SIG focusing on Wells is in formation. Wells account for 50% of all decommissioning costs within the offshore oil and gas arena. This figure illustrates the need to share best practice and tackle some of the technological and commercial breakthroughs required to allow decommissioning to continue in a controlled and predictable manner.

THE YEAR IN REVIEW

2023 was the year we launched our new brand, and it has been a joy to head the marketing and communications function over the past months with a fresh look and a reenergised approach.

As we work to lead the decom journey, effective communication with our members, stakeholders and the wider sector is critical. We strive to be the 'go to' information hub for the decom sector, and engagement continues to grow as we develop our practice across communications channels.

In the coming year we will continue to share stories from members, shout about the work we are doing to benefit the sector and develop Decom Mission's role as a portal for decommissioning information and insight.

Yvonne Allan
Marketing & Communications Lead

I am relatively new to the organisation and come with a fresh pair of eyes to the back office processes and procedures.

Along with Morag we are trying to automate more processes and procedures, removing manual tasks allowing the team more time to work on value added tasks. By using our systems to their full potential and talking to each other we are making the membership renewal process more seamless.

Partnering with highly skilled and forward thinking service providers, we hope to improve the overall service offering to our members.

Kate Glass
Finance & Administration Lead

Since joining Decom Mission towards the end of last year, I've had the pleasure of engaging with many of our members.

Through events, insightful deep dives and engaging member catch ups, I've gained valuable insights to our industry. I am passionate about process improvement and fostering efficiency. Working closely with Kate, we've introduced automation and streamlined our workflows, enabling us to allocate more time to serve and advocate for our members effectively.

Ensuring that we meet the evolving needs of our members while accurately representing the breadth of businesses within our membership base is paramount to me. Should you require assistance or simply wish to connect, please get in touch.

Morag Young
Business Development Lead

2023 was a great year for Decom Mission, where we ran and took part in over 40 events.

The highlight of the year was Decom Week 2023 which was held at Ardoo House Hotel for the first time. Decom Week is our flagship event, bringing the decommissioning community together and enabling quality networking through social events, conference and exhibition. It is encouraging to see the popularity of the event increasing each year.

Events in our Decom Live series remain popular, with one held in Port of Blyth last autumn. These events allow for large kit displays and are aimed at delegates who want to see the 'real thing'.

We have also run various webinars and had on stand presence at many major 2023 exhibitions.

Dana Smith
Events Lead

IN NUMBERS



Oil & Gas \$100bn+ global spend next 10 years, with 2800 platforms to be decommissioned (IOGP)

UKCS currently the largest decommissioning market:

- 2023 forecast: GBP £2.2bn / USD \$2.8bn
- 2026-2032: High activity window, 60% of topsides/subsea
- 2023-2032 estimate: £20.59bn / USD \$26.4
- Wells remain dominant: 51%

Gulf of Mexico is the oldest, most mature market:

- Deepwater activity alone is worth \$24bn and gaining pace (LSU)

Australia is a timebound market with strong medium term demand:

- Total estimate of \$AUS 55bn/\$USD37bn

Brazil has significant activity underway:

- 2024 - 2028: USD \$11.4bn



Nuclear

Worth an estimated \$USD200bn between 2020 and 2050, addressing over 200 active reactors.

Within the UK alone the Nuclear Decommissioning Authority manages projects on 17 sites, spending approximately £3bn/\$USD3.8bn per annum.



Renewables is less well defined, predictably. All data is for UK only:

- Q1 2023: first period in which wind derived electricity exceeded that from gas
- Current, total capacity: 30,000+MW
- 2000 wind farms, 11,000+ individual turbines
- Goal of 40,000+MW of offshore wind alone by 2040 (+25,000MW)





Number of Employees:	200 to 1000
Company Profile	<p>Boskalis Subsea Services Limited (BSSL) is your trusted partner for enhanced subsea solutions. We offer a comprehensive range of integrated services to various clients in the offshore energy market. Our operations are primarily in the North Sea, complemented by presence in other global locations.</p> <p>Equipped with a fleet of 5 Diving Support Vessels (DSVs) and a Construction Support Vessel (CSV), we have the right assets and personnel to deliver a diverse array of services. This includes a complete in-house project management and engineering service offering for subsea IRM, construction, and decommissioning projects.</p> <p>Our team, comprising over 600 dedicated onshore and offshore personnel, is our pride. Their commitment and expertise enable us to consistently deliver efficient and flexible subsea solutions.</p>
Sector(s)	Oil & Gas, Renewables
Applicable WBS elements within Oil & Gas industry:	Project Management, Well Decommissioning, Facilities & Pipelines Permanent Isolation and Cleaning, Structure Removal, Topsides and Substructure Onshore Disposal, Subsea Infrastructure, Site Remediation, Post Decommissioning Monitoring
Locations:	North Sea/global
Key Decommissioning Services	<p>As a leading specialist in the subsea sector, Boskalis Subsea Services Limited (BSSL) holds a prominent position in the North Sea market for diver-led decommissioning services. With a history spanning over 15 years in the decommissioning market, we've amassed an unparalleled knowledge base and experience in delivering these exciting projects.</p> <p>Our offerings include:</p> <ul style="list-style-type: none"> • Full EPRD project management and execution combining diving and remote intervention solutions. • Removal of redundant subsea infrastructure, including pipelines, flowlines, bundles, structures, templates, and manifolds • Flushing and disconnections • Site remediation, complete with as-found and as-built reporting • Removal of Category 1 and Category 2 abandoned subsea wellheads <p>Being part of a global company, BSSL taps into the resources of our wider Offshore Energy division. This includes Offshore Heavy Lift, offering heavy lift vessels with up to 4000t lift capability; Seabed Intervention for rock placement and seabed remediation; Marine Services for the provision of AHT vessels, and Gardline for survey services. We're your comprehensive solution provider for all decommissioning and subsea service needs.</p>

Recent Success Story:

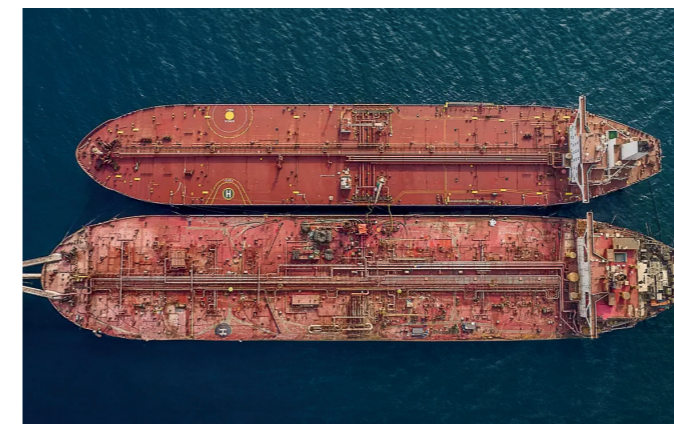
Boskalis Subsea Services (BSSL) has been supporting a major operator for multiple years on its North Sea decommissioning programme, covering a range of assets; predominately providing diving support and subsea infrastructure removal from our fleet of Diving and Construction support vessels. Since 2014, we have delivered in excess of 2000 days offshore working collaboratively with safety, trust and sustainability at the forefront.

Mattress recovery plays a huge role in the subsea infrastructure removal programme of many decommissioning projects. Between November 2022 and May 2023, BSSL was contracted to conduct the following works across the client's North Sea assets:

- Cutting and recovery of rigid spools, flexibles & control jumper removal
- Structure preparation works and recovery
- Blind flange installation and leak test
- Flexible and umbilical recovery - reverse reeling
- Well / XT preparation works
- Suction pile recovery
- Waste management plan

As part of this campaign, BSSL removed circa 1280 mattresses, from multiple assets. These mattresses were retrieved using speed loaders to suit both 2m and 3m width, weighing between 2.75Te and 4.7Te respectively. Typically, these mattresses are returned to shore and broken down as aggregate. However, as part of the sustainability drive on this programme, the retrieved mattresses have been used as a stabilisation tool for a ground embankment at a soon to be constructed grain store, with a footprint of 15,000 square feet.

Sustainability, reuse and repurposing is at the core of BSSL's ethos when conducting decommissioning activities. Every effort is made to repurpose all the recovered equipment in conjunction with our clients requirement, limiting waste. The repurposing of the concrete mattresses facilitated a structural cost saving initiative, which can be replicated in many types of ground works.





Number of Employees:	101 - 150
Company Profile	<p>Ashtead Technology is a leading international subsea equipment rental and solutions provider for the global offshore energy sector.</p> <p>Through our three service lines – survey & robotics, mechanical solutions and asset integrity – we provide specialist equipment, advanced-technologies and services to support our customers’ offshore renewable energy and later-life oil & gas projects.</p>
Sector(s)	Global Offshore Energy Sector
Locations:	Global - Based in Aberdeen, UK with regional hubs in Abu Dhabi, UAE, and Broussard, USA



Recent Success Story:

One of our recent innovations is the Ashtead Technology Mattress Recovery Tool, a significant advancement in subsea operations engineered specifically for the recovery of subsea mattresses. The OEUK decommissioning insight report of 2022 estimated 39,042 subsea mattresses awaiting recovery on the UK Continental Shelf by 2031. Ashtead Technology has developed an efficient and cost-effective solution to address this challenge. The Mattress Recovery Tool streamlines subsea recovery operations, and personnel on board and vessel time. With advanced deck equipment and experienced personnel, safe and reliable service delivery is ensured. Whether standalone or part of a full decommissioning or seabed clearance service offering, Ashtead Technology provides a seamless solution, emphasising its commitment to environmental stewardship and advancement in subsea operations.

As the original equipment manufacturer (OEM), Ashtead Technology is dedicated to refining and optimising their specialised cutting tools to meet customer needs and industry demands. Our Circular Chop Saws, part of our fleet for over two decades, have undergone continuous updates to their designs and functionalities to ensure they remain at the forefront of our cutting disciplines and technologies. With precise cutting for products and coatings up to 22” diameter, these saws serve as both primary tools and contingency cutting packages, boasting user-friendly operation.

Equipped with a powerful tungsten carbide tipped (TCT) blade, they effortlessly slice through a range of coatings and steel pipes, even in the most confined spaces. Featuring an efficient design with adaptable configurations, the Circular Chop Saws ensure reliable operation across diverse scenarios. Crafted using standardised components, they’re easily deployed for diver, ROV, or topside-controlled operations, simplifying installation and procedures.

Adding to our impressive range of tools and further expanding our cutting capabilities, Ashtead Technology are proud to introduce our innovative 11”, 23” and 40” + Ringsaw options. Following successful trials and testing, our 23” Ringsaw is now ready for operation. Removing the centre drive motor requirement, enabling superior cut depths while significantly reducing size and weight compared to conventional Chop Saw types. This compact and lightweight design maintains exceptional performance standards, offering unprecedented advantages across multiple industries, including FPSO riser disconnection and ROV operations. Our Ringsaw technology is engineered to operate in tight access scenarios, minimising dredging requirements, and reducing footprint and deck space. It represents a commitment to versatility and reliability, ensuring seamless integration into various operations, be it routine maintenance, decommissioning or emergency situations.

Engineered with sustainability in mind, this tool is crafted utilising generic components sourced from our in-house cutting technologies. Supported by a team of skilled technicians, the 23” is primed for deployment, offering a comprehensive solution complete with contingency plans. Ashtead Technology remains committed in its mission to provide innovative solutions tailored to diverse operational needs, setting new standards for efficiency and reliability in the industry.



Number of Employees:	51 to 200
Company Profile	Sabre Safety has over 30 years' experience of providing Hydrogen Sulphide (H2S) safety services to the oil and gas industry working for major operators.
Sector(s)	Oil & Gas
Applicable WBS elements within Oil & Gas industry:	Well Decommissioning, Topsides Removal, Structure Removal, Site Remediation
Locations:	Africa, North and Central America, South America, Asia
Key Decommissioning Services	Sabre has been supporting decommissioning activities in the North Sea and overseas for many years. The majority of our work involves H2S safety services for P&A campaigns although also includes the preparation and removal of platform structures.



Recent Success Story:

Sabre secured a contract through Pacific Drilling in September 2017 to provide H2S safety services for Phases I of the P&A campaign of the Chinguetti Field offshore of Mauritania onboard the Santa Ana Drillship. The mobilisation window was extremely tight requiring the equipment package to be sent to the USA within 4 weeks of contract award to meet the sailing date of the vessel.

The deadline was met with Sabre personnel installing and commissioning the gas monitoring and breathing air cascade systems as the vessel sailed to Africa. The Chinguetti Field consisted of 15 wells with Phase I covering the ceasing of production & temporary well suspension. Sabre provided H2S safety briefings to all personnel onboard the vessel with additional one-to-one training for the essential personnel.

All of Sabre's safety equipment was inspected daily to ensure it was ready for use in an emergency and routine emergency drills were carried out. Sabre's safety supervisors remained onboard the drillship throughout the campaign to provide ongoing safety briefing, to inspect, test and maintain all the equipment onboard, to provide H2S safety advice during the well activities and to support the onboard HSE team. This first phase was successfully completed in April 2018.

Sabre was selected to provided H2S safety services for Phase II to complete the final P&A of each well commencing late 2019 with an expected duration of 300 - 400 days. Sabre's scope of work was very similar to Phase I.

Good progress was achieved with the first nine wells being P&A by the end of March 2020. However, the campaign was stopped in its tracks by the COVID-19 pandemic due to closed borders, new quarantine rules, social distancing, and the obligation for employers to keep their personnel safe. Petronas, the operator of the Chinguetti Field, was forced to declare force majeure on its contract with Pacific Drilling resulting in an agreement for the drillship to be held on standby in Las Palmas.

Sabre worked closely with Pacific Drilling and agreed terms for all its safety equipment to remain onboard throughout the standby period. Sabre personnel were required to visit the vessel on a regular basis to maintain the equipment. Travel arrangements were extremely difficult with global restrictions and isolation periods. However, Sabre's Logistics Team met the challenge, and the equipment maintenance was completed to plan. In January 2021, the campaign resumed to complete the remaining six wells.

Both the movement of equipment and personnel remained challenging due to the ongoing pandemic. Thanks to the dedication of Sabre personnel, the H2S safety services were delivered to our normal high standards throughout.

Sabre is currently providing H2S safety services for several decommissioning projects offshore of the UK.

UTILITY ROV SERVICES

Number of Employees:	<50
Company Profile	Utility ROV is the leading provider of subsea infrastructure removal decom solutions in the North Sea, through development of the UTROV technology.
Sector(s)	Oil & Gas, Renewables
Applicable WBS elements within Oil & Gas industry:	Subsea Infrastructure, Site Remediation
Locations:	Global
Key Decommissioning Services	<ul style="list-style-type: none"> • Tier 1 - Subsea infrastructure removal decom contractor • Leader in mattress recovery • Pipeline cut & recovery • Deburial • Survey • Site remediation and debris clearance • 1 System - 1 Team / Interchangeable Tooling / Multiple Decom Operations / React to all



Recent Success Story:

Utility ROV, with our UTROV and decommissioning tooling, has now been proven over multiple large scale North Sea projects to reduce subsea infrastructure removal costs by 30%. This through the multi-tool functionality, significant decreases in recovery cycle times and ability react to unplanned project elements. The next step was to engineer a project solution centred around the core fundamentals, with a focus on marginal gain 'production line' processes, enabling higher project efficiencies compared to what has been witnessed in the industry.

A progressive North Sea operator provided the contracting platform for the proven technology to complete large scale pipeline removal within an SNS field. Several factors which included high costs, hard seabed and piggyback detachment, prohibited trenching the pipeline to the industry required 600mm below surface. The primary scope was to cut and recover 26.1km of 18" pipeline, complete with 3" piggyback. The solution was to cut the assembly into 13 m sections subsea, for subsequent recovery and respective transport ashore for recycling. In addition, the operator included significant complementary works to the scope, including pipeline end and 500m zone remediations, utilising the array of decommissioning tooling to complete; pipeline cutting & recovery, mattress recovery, surveys, rock installation, structure recovery and debris clearance using a multi-tool philosophy.

As with all subsea infrastructure removal projects, a key challenge is safely maximising an efficient material handling exercise, with vessel deck capacity and stability crucial to augment the amount of recovered cargo. A focus was on limiting the number of transits for offloading purposes, minimising vessel time, fuel burn and emissions output. The project was completed from a 98m construction support vessel of opportunity due to limited access to larger vessels in the market. Deck carrying capacity of this CSV was maximised through innovatively engineered pipe recovery deck layouts and collaborative consideration of vessel stability. 8400Te of recovered pipeline was transported over 10 separate pipe offloading port calls during each of which, the vessel carried its largest deck cargo to date.

During the planning phase, when comparing full removal viability against trenching or rock-dump, the operator evaluated URS cycle times relative to the use of traditionally operated WROVs and tooling. Due to the number of cycles required across 26.1km, for every 1-minute additional time taken on either cutting or recovering a single length of product, this would add 1.5 days operational time onto the overall project duration.

Innovative cutting blade profiles were utilised, reducing the forces experienced when performing the subsea cuts, providing marginal gains in the cutting cycle time. These were monitored live to determine operational performance against the project baseline. A remote level correcting grab, capable of dealing with high seabed suction forces was developed to optimise pipe recovery cycle times. Once recovered to the landing frame on deck, innovative handling machinery was utilised to concurrently rehandle the pipe sections with minimised personnel intervention.

The efficiency focus of the UTROV led the project to reduce cost, fuel burn and total emissions, by 30% compared to incumbent market offerings.



Number of Employees:	200 to 1000
Company Profile	Claxton combines a fast track design and project engineering service with a large call-off inventory to deliver solutions for decom projects globally.
Sector(s)	Oil & Gas, Nuclear, Renewables
Applicable WBS elements within Oil & Gas industry:	Well Decommissioning, Topsides Preparation, Topsides Removal, Structure Removal, Subsea Infrastructure
Locations:	Africa, Middle East, South East Asia, North and Central America, South America, Asia
Key Decommissioning Services	Provision of cutting, dredging and recovery services for topside, sub-structure and subsea removals. Provision of perforating, cementing, cutting and conductor recovery services for the removal of subsea and surface wells.
Recent Success Story:	<p>Spirit Morecambe Bay Jacket Decommissioning Claxton supported in the removal of DP3 and DP4 Spirit Energy's Morecambe Bay jackets in the East Irish Sea. Claxton removed the two jackets using our well track recorded equipment and engineered solution including our Internal Pile Cutter, Soil Plug Removal Tool, Subsea Drill & Pin, Diamond Wire Saw and Deployment Tugger Frame.</p> <p>Shell Subsea Well Severance campaign Provision of water abrasive cutting services and wellhead recovery tooling to cut and recovery six multi-string wells in the UKCS. Claxton provided an end-to-end vessel-based decommissioning solution encompassing planning, preparation, equipment mobilisation and offshore execution.</p>



DECOM MISSION SURVEY: 2023

With over 100 responses from respondents representing operators, supply chain participants and regulators, the Decom Mission Survey provides insight on themes from Commercial and Contractual through to Regulations and Safety.

The report will provide a deep-dive into the scores across demographics, themes and comments made by the participants, aiming to supply an insight into decommissioning across the energy sector from the perspective of its participants.

In partnership with



EXECUTIVE SUMMARY

Overview

Average Survey Score of 0.62:

Compared to other surveys of this kind, there are relatively low-to-average scores throughout. An average across the survey of 0.62 overall (halfway between Neutral and Agree) doesn't change much across demographics or themes except for Safety which is a positive outlier. This suggests a level of dissatisfaction with the decom industry by the respondents.

Safety a high-point with a score of 0.82:

Respondents across decommissioning take safety seriously and it has become embedded into the culture of organisations.

Project execution needs attention:

With three out of the five lowest scoring questions all belonging to this theme, both the scores and comments suggest there is an issue in delivering work on time and to budget.

Insight hidden in the comments

Although most demographic differences were slight, there were some variations between different types of organisation, and respondents with different lengths of service in the decommissioning industry.

- More positive scores for shorter tenures in decommissioning
- More positive scores for shorter tenures in the energy industry as a whole (although there were very few respondents with limited energy industry experience)
- Similar scores between supply chain and operator / asset owner – more positive in renewables and nuclear, less positive for regulator, trade organisation and other (but limited number of respondents)

Insight hidden in the comments

Regulatory Challenges and Inefficiencies:

More than half of respondents consider both Regulators and Regulations inadequate.

Supply Chain Capacity and Skills Gap:

Nearly two thirds feel training is insufficient for those hoping to join.

Lack of Visibility and Uncertainty in Work Pipeline:

Multiple comments on this from questions across themes such as: "More certainty needed from regulators on their timetables which are repeatedly slipping." and "Presently the demand is low to the UK facilities with work being taken into mainland Europe. A clearer understanding of the future prospects and timings of release of assets will be beneficial for business strategies."

METHODOLOGY

The survey was divided into eight themes with questions covering different aspects of each. For some themes, straightforward Likert Scale questions were used to gauge opinion and strength of feeling; for others, multiple choice questions were more appropriate.

Where Likert Scale questions were used, these have been converted into scores between 0 and 1. A 0 represents an entirely negative perception ("Strongly Disagree") and a 1 represents an entirely positive perception ("Strongly Agree"). The averages used in the report are calculated using the responses to these questions.

Occasionally, a question was reverse-coded, such as with the question "There is a notable decrease in experience/skills among individuals in the decommissioning industry every year" where a negative response should actually be considered as a positive. These questions are used to ensure consistency of responses – where they have been used their answer has also been reversed when used in calculations.

Finally, all themes have a comment question for the respondent to leave their thoughts related to the specific topic. A Final Thoughts question also allowed for topics that may not have been raised. These questions have been subject to AI and human analysis to extract similar topics and sentiment, and these are included in this report with each theme.

Themes

- ENVIRONMENTAL
- COMMERCIAL
- CONFIDENCE
- CONTRACTUAL
- PEOPLE & SKILLS
- PROJECT EXECUTION
- REGULATION
- SAFETY

Likert Scale Questions

15

Comment Questions

9

Multi Choice Questions

11

Grid Scale Questions

5

Checkbox Questions

1

Grid Choice Questions

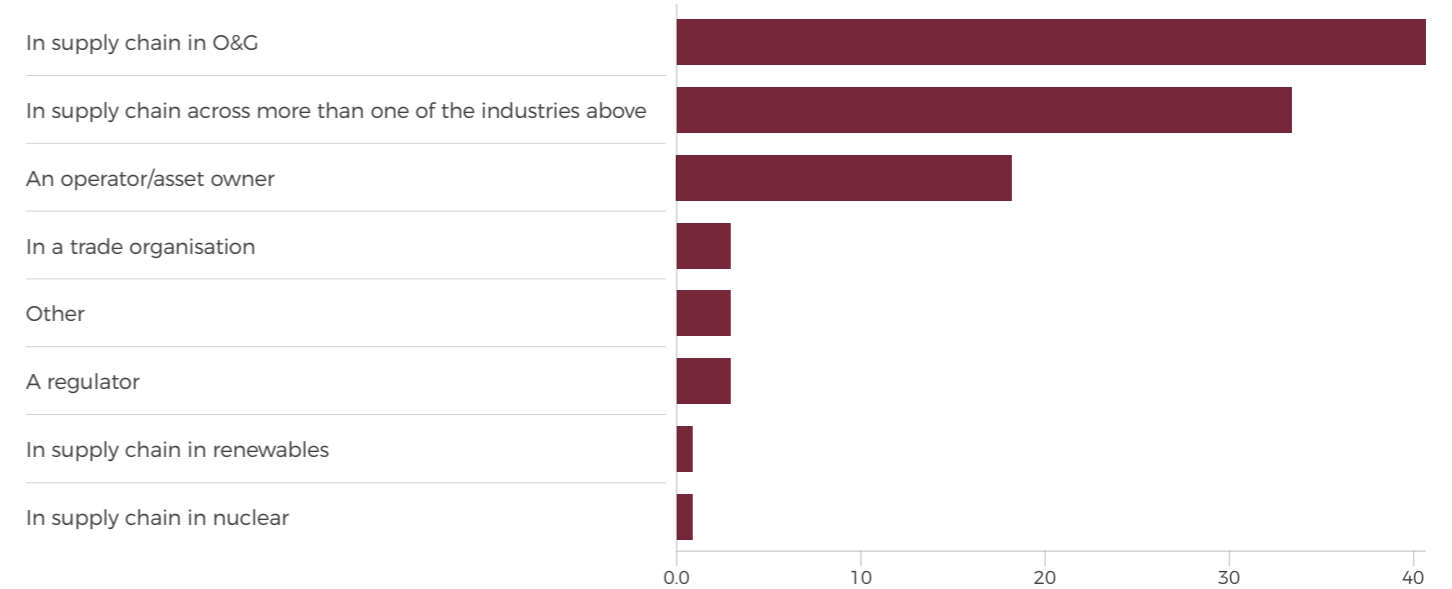
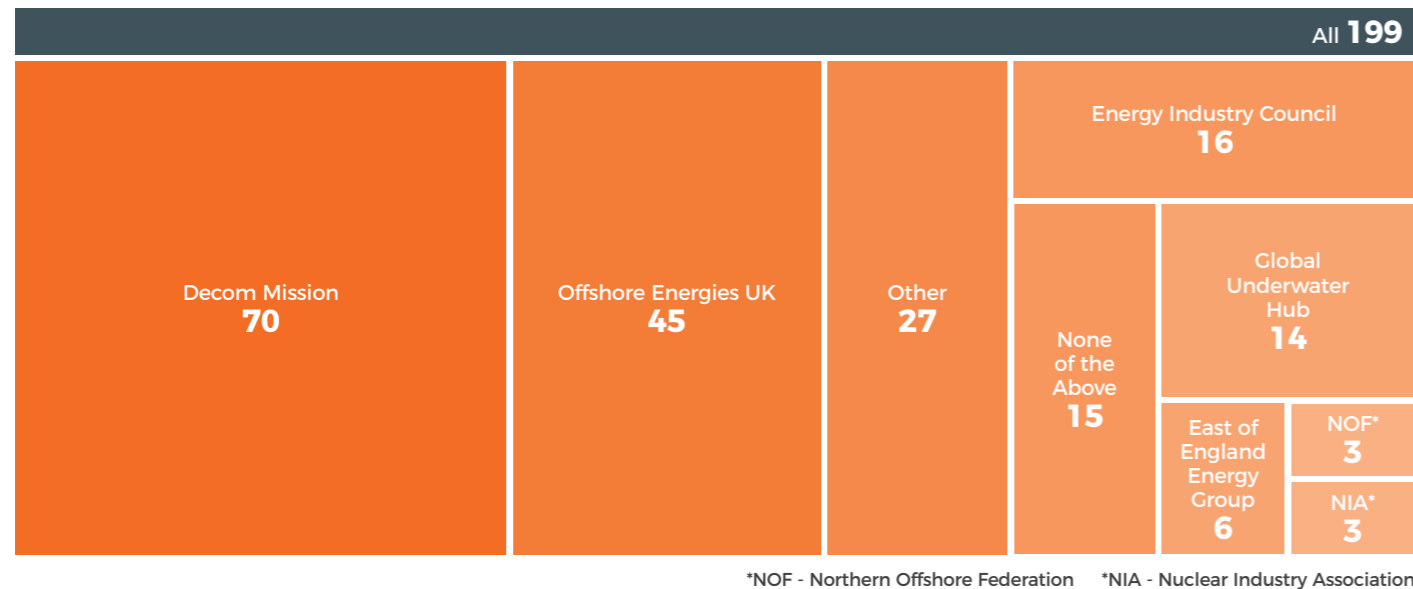
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ORGANISATION DEMOGRAPHICS

Most respondents were members of Decom Mission, with a considerable proportion (nearly half) also members of Offshore Energies UK. Only 15% of respondents were not members of any of the organisations listed.

About a third of respondents work in supply chain in oil & gas with more than half of respondents working in supply chains across industries. Very few renewables, regulators and trade organisation members responded to the survey which should be considered when interpreting the results.

Average Scores by Theme:

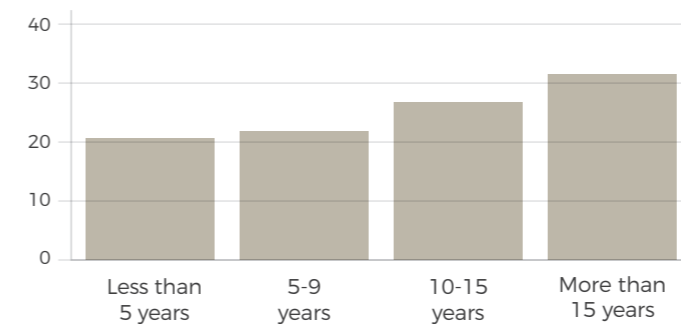


Respondent Demographics

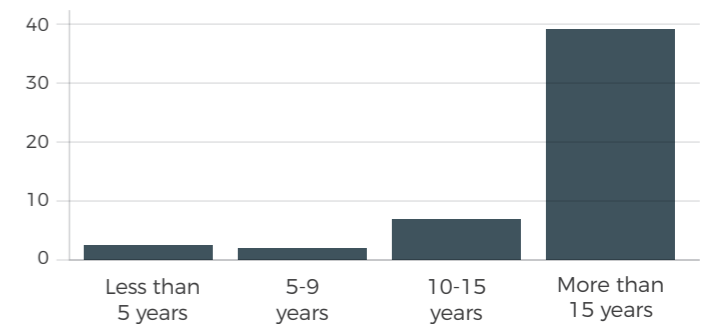
The demographics relating to tenure tell an interesting story: while the tenure split across decommissioning (how long the respondent has worked in the decommissioning industry) is fairly even with a slight skew towards longer tenures, the split across tenures for work in the energy industry as a whole looks quite different. Almost all respondents have more than 15 years of experience in the energy industry.

This has some parallels with the comments and scores in the People & Skills Theme, one of the features of which was the lack of new talent entering the industry.

I have worked in decommissioning:



I have worked in the energy industry:



THEME OVERVIEW

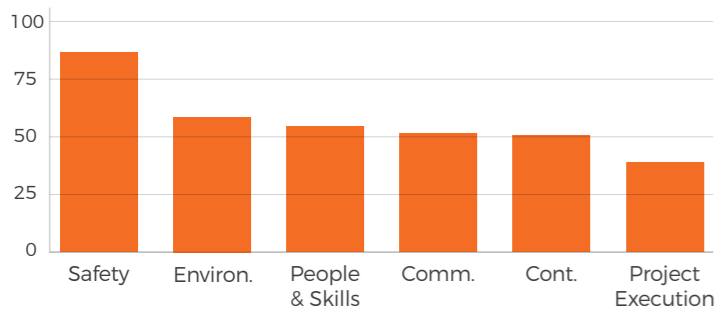
Where Likert Scale questions were used, these have been averaged to show the relative scores across Themes. The chart below shows an overview of the average scores for all Likert Scale questions in each theme.

Safety is far and away the highest scoring theme at 0.87 which when converted back to the survey is somewhere between Agree and Strongly Agree. This was consistent across all questions in the theme.

On the other hand, **Project Execution** was an outlier at 0.39, with all three of the questions in the bottom five overall in the survey.

The other themes performed similarly - **People and Skills** was interesting in that it had a high scoring question set against two lower scoring questions which placed it in the middle of the pack.

Average Scores by Theme



Theme Comparison

As well as comparing the scores for each theme, it's also informative to compare the variance in the scores. Or in other words, how much agreement there was in the responses.

The graph illustrates a comparison of the average score (along the bottom on the X-axis) with consensus (the variance, along the left Y-axis) per theme.

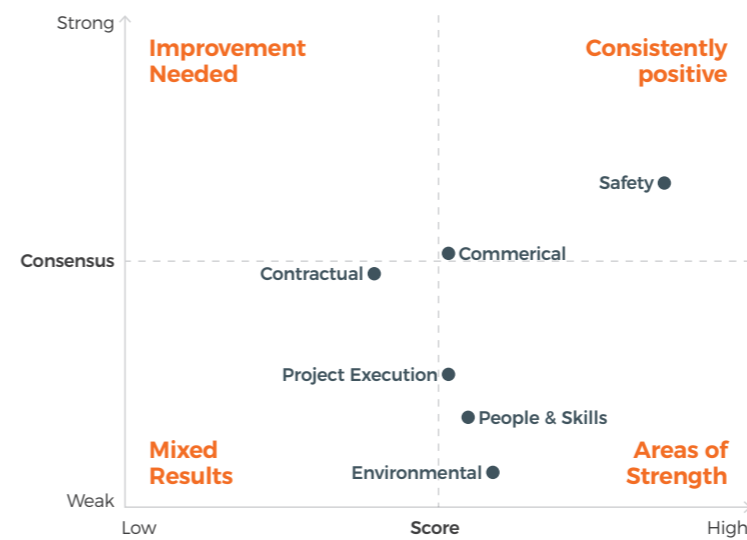
To aid comprehension, the four quadrants of the chart have been labelled with scores approaching the top-right being the most consistently positive **Safety** sits here and **Commercial** also sneaks in but probably has more in common with the other themes. Scores in the top left show a high level of consensus but low scores - no themes have appeared here which is a positive.

The bottom of the chart shows where scores are mixed - that is, there are lots of different scores and no consensus. Most of the themes have ended up here which may be reflective of the wide variety of industry participants completing the survey.

Safety is the highest scoring theme and also the most consistently high-scoring. In other words, most respondents answered similarly positively - a reassuring result.

However, **Project Execution** scored considerably worse as the lowest scoring theme with 0.39. Although it wasn't quite so consistent as **Safety** or **Commercial** (which scored similarly), it still had a fairly consistent set of answers with all three Likert Scale questions in the theme skewing negatively.

The cluster of themes near the bottom of the chart, **Contractual**, **People and Skills** and **Environmental** all scored similarly and on the surface look quite close to **Commercial**. However, the scores for **Commercial** were all relatively similar whereas for the other three themes, they were much more mixed which suggest different organisations or demographics may be scoring differently. Further analysis can be found in the individual theme pages.



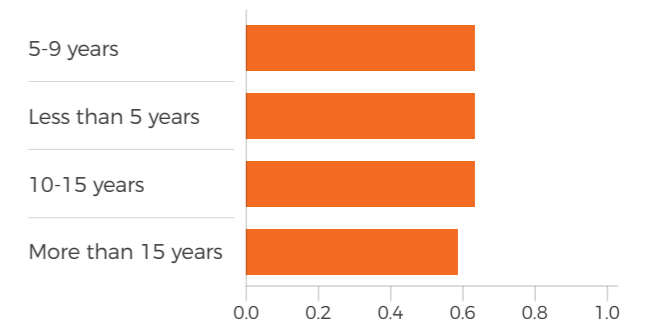
Theme by Demographics

Splitting the data by demographics yields some results and some further questions.

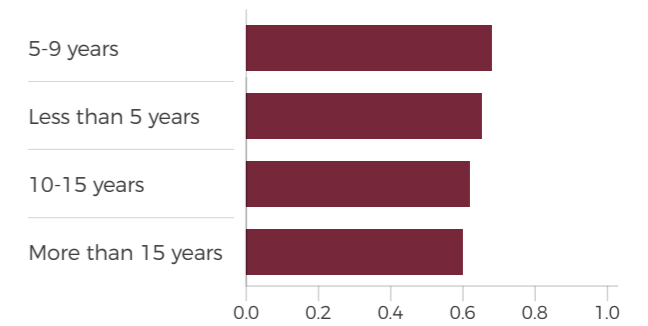
Firstly, cutting the scores by Tenure allows us to see consistently higher scores by those with shorter tenure, both in decommissioning and in the energy industry more widely. However, this should be tempered by the number of respondents completing - for those in the energy industry almost everybody had long tenures with only a few having less than 10 years. In decommissioning this was more even, so we can probably suggest there is a higher level of positivity from those who have been in the industry a shorter amount of time.

When looking at scores by Organisation however, the situation changes. Renewables and nuclear have a much more positive outlook than those in trade organisations or regulators. However, again when looking at only those groups with substantial numbers of respondents, the difference disappears with supply chain and operator/asset owner both hovering just over 0.6.

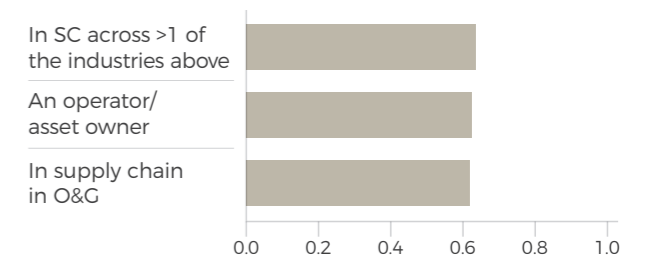
Average Scores by Tenure in Decommissioning:



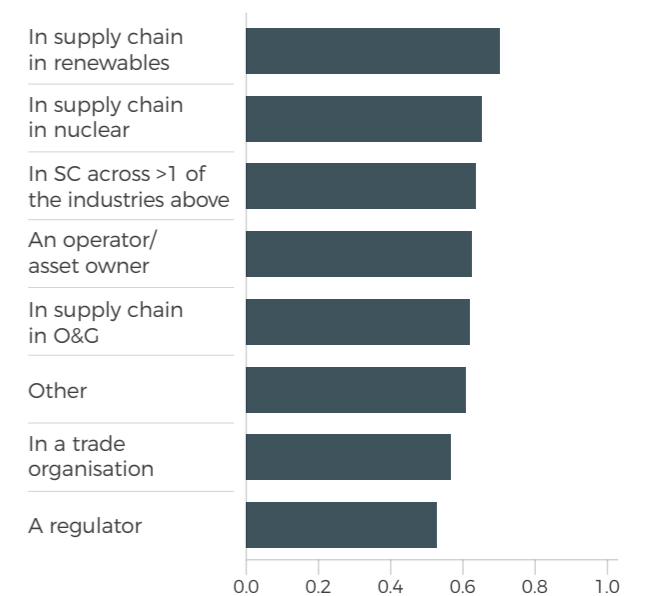
Average Scores by Tenure in Energy Industry:



Average Scores by Organisation (>3 respondents):



Average Scores by Organisation (All respondents):



COMMERCIAL

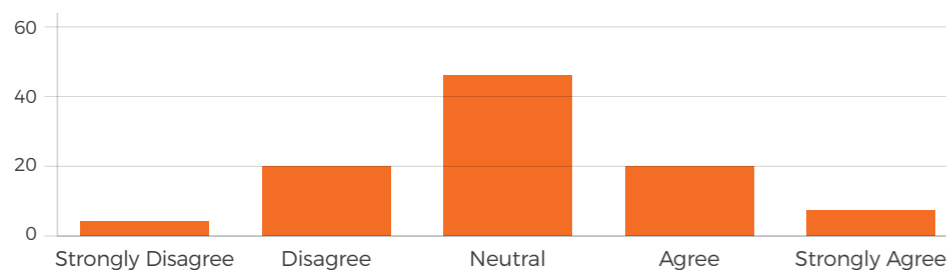
The commercial aspects analysed by the survey concerned margin, revenue, payment terms and the future outlook of the organisation.

Most responses to the question "I consider the margin my company receives [...] to be fair and reasonable" were relatively neutral leading to an overall score of 0.51 and a very even spread between agreement and disagreement. This positions the theme comparatively well - although the score is a little lower than some other themes, it just tips into the positive and is also slightly higher in consensus than the other themes (excepting Safety).

More positively, most respondents felt their organisations could manage cashflow (0.71) and debt (0.69) with slightly fewer feeling that future investment and access to capital (both 0.63) would be accessible.

Finally, the revenue proportion of 25% or less and payment terms of 60 days are the most typical for the respondents although most other options had at least a few responses.

Score distribution:

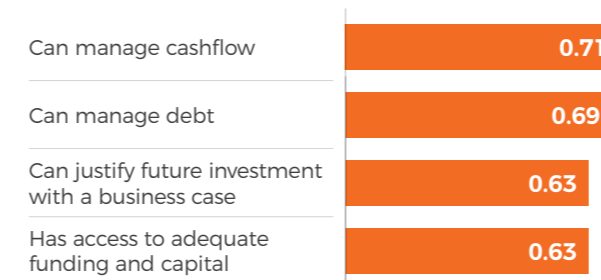


Average scores by question:

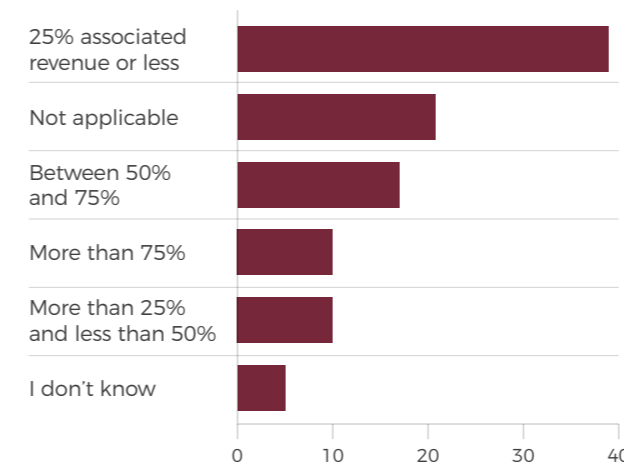
I consider the margin my company receives for the decommissioning work it has won to be fair and reasonable



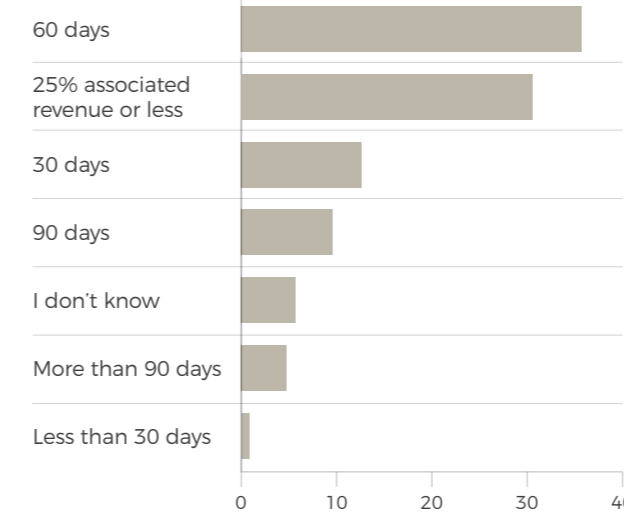
In order to meet decommissioning demand of the future my company:



Within my organisation, decommissioning accounts for the following proportion of revenue:



My company is usually paid for completed decommissioning work in:



Feedback Overview

The sentiment in the comment responses is concern and frustration. The respondents feel squeezed by budget constraints, project delays, and pressure for cost reductions.

They express concern over the lack of experienced personnel, the challenge of maintaining profitability margins, and the hurdles in investing in sustainable technologies.

There's an overall frustration about the commercial challenges facing the decommissioning sector and a desire for more sustainable and equitable business practices.

Feedback Top 5

1. Budget Constraints & Cost Reductions (6):

Numerous participants expressed concern about budget limitations, the difficulty of predicting costs accurately, and the necessity of spreading out expenses over several years. They mentioned the continuous pressure from regulators and operators to reduce costs which directly impacts suppliers, especially the smaller ones, creating unsustainable conditions.

2. Project Delays & Deferral (5):

Respondents frequently acknowledged the impact of delayed and deferred decommissioning projects on business planning and financial projections. There was frustration over the lack of certainty and predictability these conditions impose, notably causing budget shortfalls.

3. Margin & Profitability Concerns (4):

The challenge of attaining a fair and reasonable margin on decommissioning projects is of significant concern, with some survey participants implying that companies might refuse work if it isn't financially worthwhile. This issue extends to the broader problem of sustaining commercial outcomes in the decommissioning sector.

4. Lack of Qualified Personnel (2):

Several responses centered on the shortage of experienced personnel, specifically those with 8 to 15 years of experience, presenting an obstacle to growth in the decommissioning sector.

5. Technological Investment (2):

Respondents indicated that business cases for investing in decom technology rely on project data for several years, which can be difficult to gather. Firms may be pressured to choose cheaper, less sustainable tech options as a false economy, exacerbating industry's environmental footprint. There is a need for more appreciation for the planning and environmental facets of decom projects.

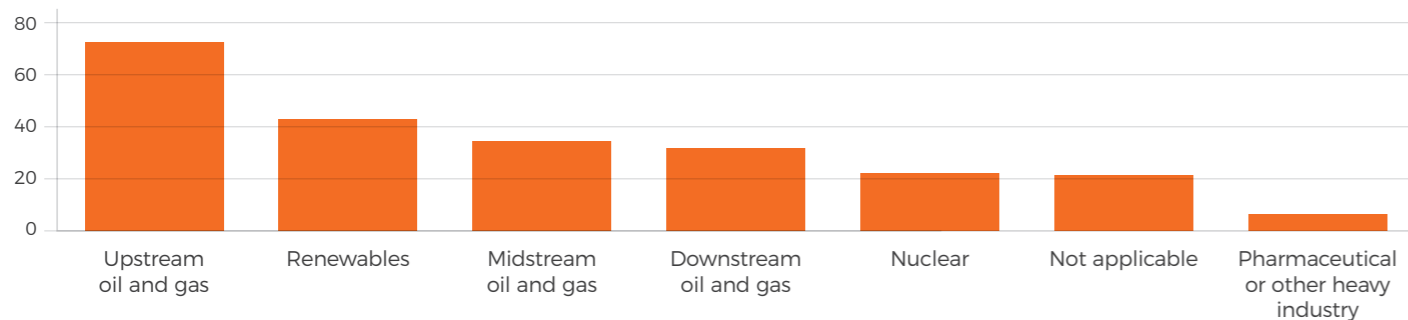
CONFIDENCE

Confidence did not have any Likert Scale questions, instead utilising multiple choice questions to understand the respondent's feelings about the future of the industry.

The question "What impact will the Energy Profits Levy (EPL) have on oil and gas decommissioning in the UKCS" provides an interesting insight into the potential split in demographics between operator/asset owner and supply chain. When looking at all data there is fairly even split between respondents that feel the EPL will accelerate decommissioning, versus those that feel it will be delayed. However, when separating out operator/asset owners and supply chain respondents, the data becomes a little clearer; for operator/asset owners, their belief is that the EPL will generally delay decommissioning, while supply chain are a little more split with most choosing the option accelerate decommissioning (although a sizeable minority selecting either delay or strongly delay decommissioning).

For the question "My organisation already pursues or plans to pursue decommissioning opportunities in the following sectors", upstream oil and gas was the highest selected with most organisations picking this option. Pharmaceuticals or other heavy industry was selected by only seven respondents, all of which worked in either oil & gas supply chain or across more than one supply chain industry.

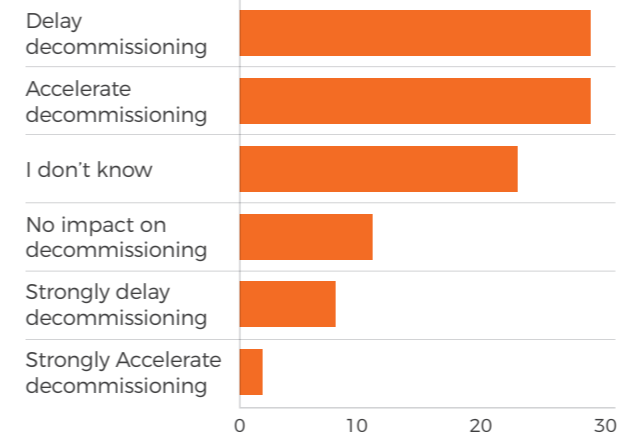
My organisation already pursues or plans to pursue decommissioning opportunities in the following sectors



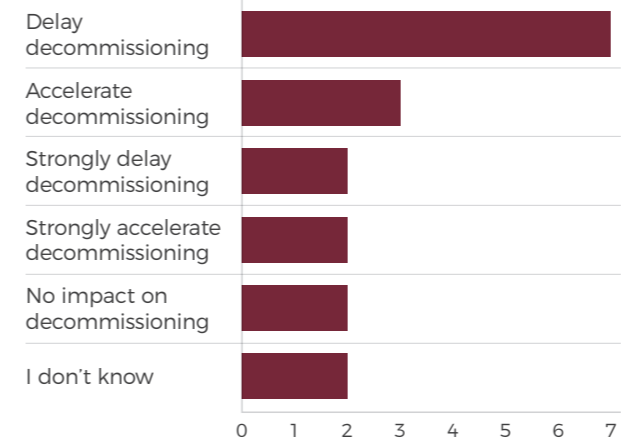
Full circle: decommissioning in the energy sector.

What impact will the Energy Profits Levy (EPL) have on oil and gas decommissioning in the UKCS?

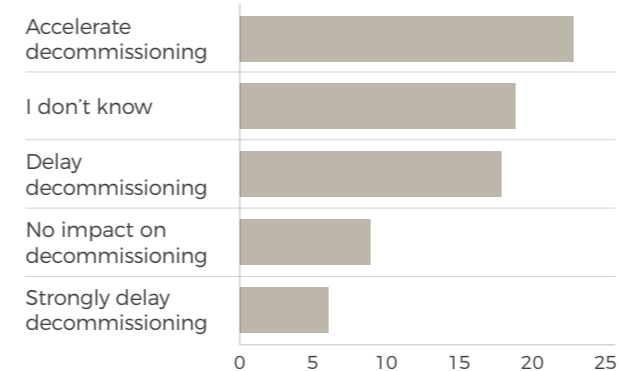
All



Operator/Asset Owner



Supply Chain



Feedback Overview

The overall sentiment from the survey responses is negative.

Respondents reported a lack of confidence in decommissioning activity primarily due to continuous delays and deferrals, lack of transparency, offshoring of projects, and unsuccessful ventures into the nuclear sector.

There was a feeling of dissatisfaction and uncertainty about the future, along with apprehension about the impact on the UK supply chain.

A small number of respondents expressed an adaptive attitude, recommending diversification into other sectors.

Feedback Top 5

1. Concerns About Delays & Deferrals (6):

Many respondents expressed concern about constant delays and deferrals in the decommissioning process, citing political and fiscal events, oil prices changes, and extended production as some of the factors contributing to this trend.

2. Need for Transparency (3):

The respondents called for increased transparency and visibility in decommissioning activities. They advocated for a strategic, publicly available roadmap for each asset, complete with the expected end date and justification for any changes.

3. Offshoring of Decommissioning Projects (3):

The responses reflected disappointment about the shift of projects overseas. This move is perceived as a threat to the UK supply chain, reducing confidence in future activity being retained by it.

4. Wasted Efforts in the Nuclear Sector (2):

Some employees expressed frustration about their unsuccessful attempts to secure work in the nuclear sector. They felt that contracts were one-sided, demanding the surrender of their intellectual property.

5. Diversification & Adaptability (2):

A few respondents suggested moving beyond the UKCS and exploring other sectors such as renewables and nuclear. This, they believe, could contribute to their planned growth plan.

CONTRACTUAL

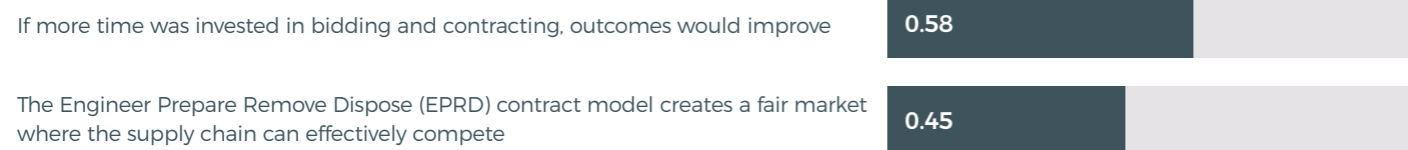
Of the two Likert Scale questions asked in the Contractual theme, one had fairly mixed answers while the other was more clear cut.

Interestingly, the answers to the question "If more time was invested in bidding and contracting, outcomes would improve" had one of the widest ranges of answers across the survey. While there was a slight skew towards Agree, there were high numbers across all answers suggesting that there is no consensus. This split remains even when looking at different demographic breakdowns. Operators answer more negatively than supply chain but there are still a wide range of answers.

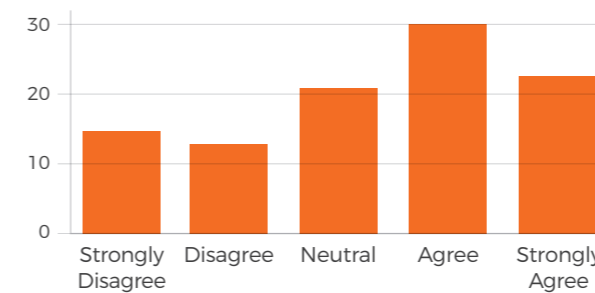
The question around Engineer Prepare Remove Dispose (EPRD) contract models is more clear cut - most feel neutral with a skew towards disagreement leading to a low score of 0.41 and bringing the average for the Contractual Theme down.

Finally, the question regarding project win ratios shows that a 1:3 win rate is the most common, with progressively lower rates for 1:5 and 1:10.

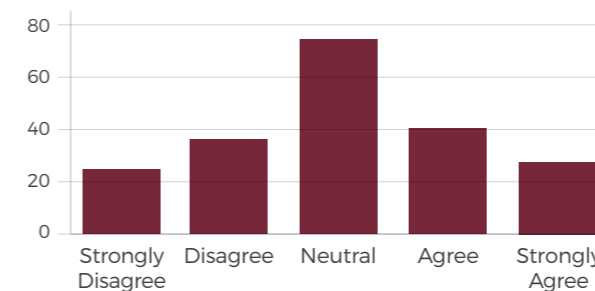
Average scores by question:



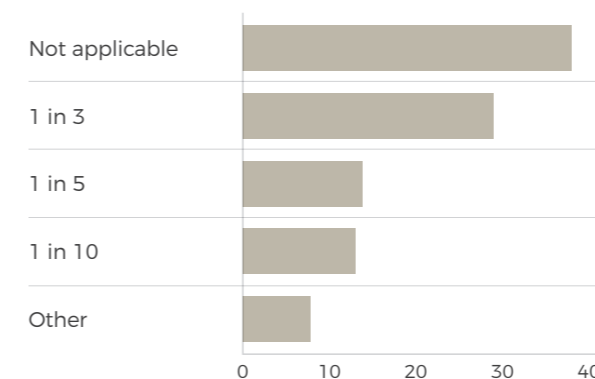
If more time was invested in bidding and contracting, outcomes would improve:



The EPRD contract model creates a fair market where the supply chain can effectively compete:



In my organisation, the ratio of project wins to project bids is:



Feedback Overview

The general sentiment from the survey responses appears to be a mix of frustration and a desire for changes in certain practices.

Many respondents expressed concerns over current practices such as the EPRD model, ineffective early planning, and cumbersome bidding processes.

However, they also offered potential solutions for improvement, suggesting a desire for evolution and more efficiency in the sector.

There is a strong emphasis on the need for better operator and supply chain relationships as well as a more balanced consideration for the onshore aspect of decommissioning projects.

Feedback Top 5

1. Need for Early Planning & Contract Strategies (16):

Many employees emphasised the importance of front-end planning and reimagining current contracting strategies. Properly done, these processes could result in cost and time savings, and more effective results. The concern for operators to invest more in decommissioning process was also highlighted.

2. Review of the EPRD Model (12):

The EPRD (Engineer, Procure, Remove and Dispose) model was seen by several respondents as outdated, not offering enough flexibility and requiring overhaul. Some suggested that EPRD should apply beyond offshore locations and be restructured to benefit the supply chain alongside operators.

3. Critical Analysis of Bidding Process (10):

The bidding process was frequently mentioned as being time-consuming, costly, and often yielding low returns. A call for more transparency during the bidding process was made, with some suggesting that the focus should be more on project execution rather than bidding and contracting.

4. Poor Acknowledgement of Onshore Operations (7):

Respondents pointed at the lack of attention given to onshore aspects of decommissioning, and called for more understanding and transparency about onshore waste management, decontamination and recycling processes.

5. Need for Better Operator & Supply Chain Relationships (6):

A number of responses expressing dissatisfaction with current relationships between operators and supply chain. Employees identified a need for more collaboration between all stakeholders, and openness to new contracting models, in order to provide more cost-effective and efficient solutions.

ENVIRONMENTAL

The Environmental theme had average scores compared to the other themes with 0.59 for the question “Within the oil and gas industry, rigs to reefs, as practiced in Gulf of Mexico, whereby items are deposited on the seabed, should be adopted in more regulatory jurisdictions”.

However, this question is specific and could be argued. More informative generally are the three related questions regarding decarbonising decommissioning projects. Each of the responses around capability, willingness and commitment, were neutral scoring between 0.5 and 0.56. When cutting across different demographics, these scores don't change significantly suggesting this feeling is shared across the respondents.

More positively, the question regarding environmental protection was overwhelmingly positive with almost all participants suggesting that this topic is either always or frequently discussed.

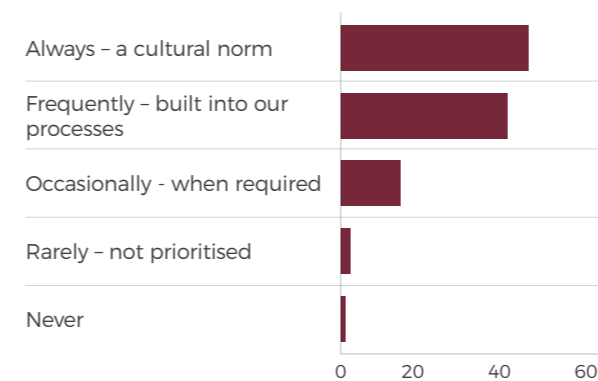
The last question regarding circularity and re-purposing in decommissioning has an interesting breakdown in the data – most participants believe that it should be pursued “more aggressively”. The remaining participants are split equally down the middle between feeling that it is “currently not addressed appropriately” and “currently being developed at an adequate pace”. Again, cutting this by demographics doesn't change things massively although there is a slight skew towards supply chain participants feeling that more action is needed.

Average scores by question:

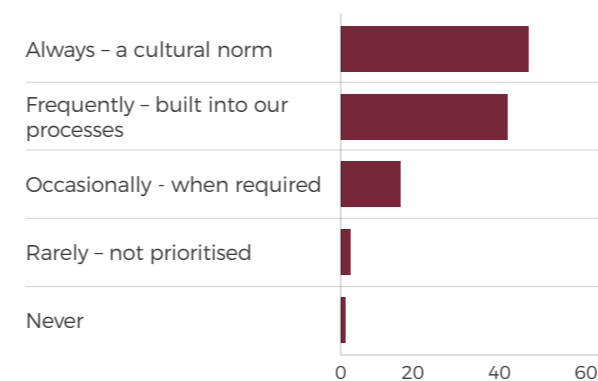
Within the oil and gas industry, rigs to reefs, as practiced in Gulf of Mexico, whereby items are deposited on the seabed, should be adopted in more regulatory jurisdictions

0.59

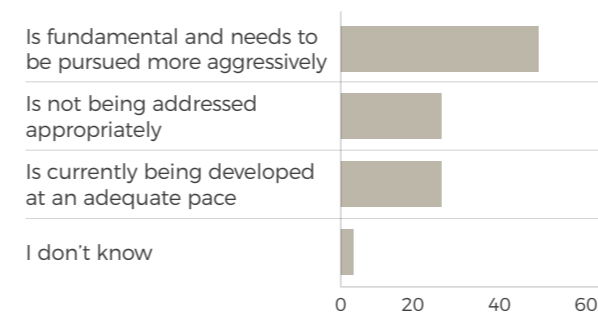
Environmental protection is discussed in my organisation:



Environmental protection is discussed in my organisation:



Circularity and repurposing in decommissioning:



Feedback Overview

The general sentiment from the responses suggests significant concern and dissatisfaction with current practices in offshore decommissioning.

Respondents voice frustration over perceived environmental neglect, shortsightedness and regulatory inadequacies.

They advocate for more responsible practice, including better recycling and reuse of assets, support for circular economy principles, more effective regulations, and a commitment to decarbonising decom operations.

Feedback Top 5

1. Rigs to Reefs (16):

Respondents displayed varying sentiment towards the practice of “Rigs to Reefs,” where decommissioned structures are left in the marine environment instead of being fully removed. While some see it as an advantageous practice, others perceive it as environmentally harmful or lacking sufficient scientific and regulatory scrutiny.

2. Recycling & Reuse of Assets (12):

A common complaint is that the industry is overly focused on new construction rather than the recycling and reuse of decommissioned assets. Many expressed frustration with the waste and inefficiency associated with this practice, while others voiced concerns about the lack of regulation and licensing for companies offering reuse services.

3. Decarbonisation (8):

There is substantial interest in decarbonising the decommissioning process, although respondents also highlighted numerous barriers including costs and lack of operator willingness. Some responses also linked decarbonisation to potential cost savings and the need to reduce vessel time in decommissioning operations.

4. Government & Regulatory Oversight (7):

Respondents expressed dissatisfaction with the perceived lack of leadership and effective regulation from government bodies, concerning environmental impacts of decommissioning, proper licensing of recycling/reuse companies, and promotion of circular economic practices. Note: since the survey was carried out, a decarbonisation plan was issued by OGA on March 27th.

5. Circularity & the Circular Economy (5):

The concept of “circularity” or using repurposed assets from decommissioning in a meaningful and systemic way was a recurring theme. However, respondents suggested that the industry falls short of this goal due to factors such as cost, perceived complexity, and lack of proper incentivisation and understanding of the concept.

PEOPLE & SKILLS

People and Skills provided the biggest swing between answers across themes in the survey.

The question "I see myself still being part of the decommissioning industry in five years time" scored a relatively high 0.71 which placed it as the top scoring question in the survey outside of those asked in the Safety theme.

However, to counter this, the questions regarding skills gaps and decrease in experience both scored under 0.5 supporting up the comments made on this theme suggesting that there is a skill gap and need for more specialised training in decommissioning.

These results are supported by the additional questions which ask about retaining (0.46) and attracting (0.36) individuals to decommissioning. Both questions scored very poorly echoing the findings across this theme. As do those questions regarding training available for those hoping to develop (0.42) and those hoping to join (0.37).

Average scores by question:



PEOPLE AND SKILLS ARE A CRITICAL CONCERN IN MOST SECTORS. BUT IT IS NUANCED AND WILL REQUIRE SMART SOLUTIONS."

Sam Long
Decom Mission, Chief Executive Officer

In my experience it is challenging to:



The training available in the decommissioning industry is sufficient for those:



Feedback Overview

The general sentiment among respondents is one of concern and urgency regarding the future of the offshore decommissioning sector.

There is a strong perception that while decommissioning presents a unique set of challenges and opportunities, it is misunderstood and unappreciated as an enabler for the Energy Transition.

There is frustration around the lack of specialised training programmes, perceived career uncertainty, inadequacy of current training initiatives and a shortage of skilled personnel.

Additionally, participants express a desire for a well-defined career pathway in decommissioning and advocate for industry bodies to define accredited career pathways to attract and retain talent.

Feedback Top 5

1. Need for Specialised Training Programmes (15):

There appears to be a consistently expressed need for specialised decommissioning training programmes that go beyond theory and include on-the-job experience. This includes not just core decommissioning skills but also related competences like risk management and project management.

2. Perception & Career Uncertainty (12):

Decommissioning is perceived as not a viable long-term career due to lack of certain work. This perception is hindering retaining and attracting talent, particularly from the younger workforce.

3. Need for Experience & Skills Transfer (10):

Respondents pointed to an ageing population within the sector and the urgent need to transfer this wealth of experience to younger entrants to sustain the industry.

4. Current Training Initiatives are Inadequate (9):

There is a common theme of dissatisfaction with current training offerings such as the MSc courses from The University of Aberdeen.

5. Decommissioning as Part of Energy Transition (8):

Respondents discussed the importance of viewing and promoting decommissioning as part of the broader energy transition pathway.

PROJECT EXECUTION

Project execution is the lowest scoring theme across the survey and there is some interesting data in the responses to help understand why.

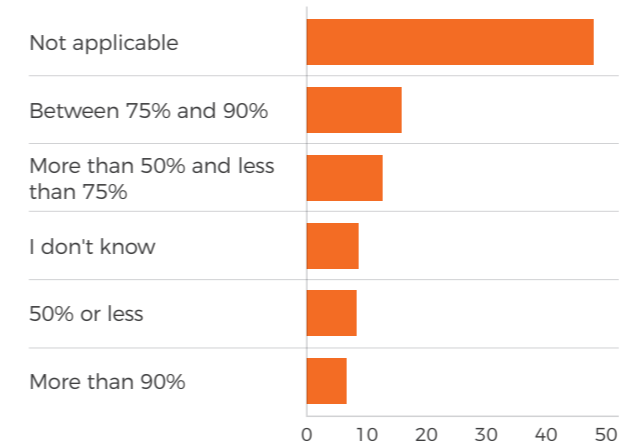
Each of the three Likert Scale questions focused on a different aspect and in each case, the scores were neutral to negative. The highest scoring question was "Within my experience, published outturn reports accurately reflect project outcomes" at 0.47.

The score distribution for all three questions (as shown in the diagram) shows a high peak for Neutral and this question is no exception. This could be because the respondents don't know the answer rather than having strong feelings - there are almost equal scores between disagree and agree with a slight skew towards disagree and no real change across demographics.

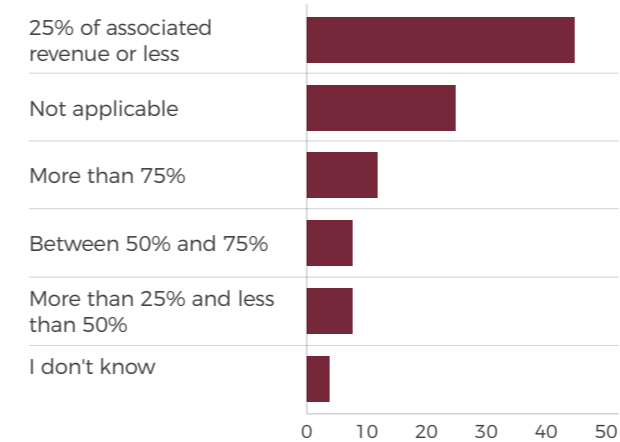
The other questions scored similarly but with slightly more negative responses. Effectiveness at meeting current demand (0.38) and need for more R&D (0.33) are the two lowest scoring questions in the survey and illustrate further reasons that Project Execution is so low scoring.

The further questions asked in Project Execution were regarding project delivery satisfaction (a slightly higher 0.58), project budget vs estimate (0.4) and project delivery time vs schedule (0.36). Again, these echo scores from across this Theme suggesting that Project Execution is a low-point for the industry.

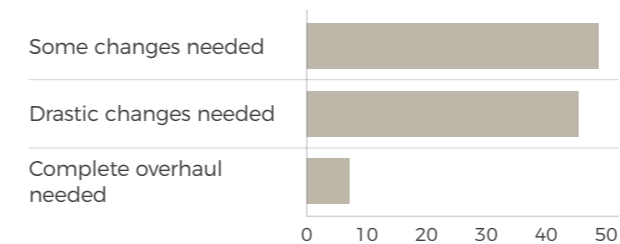
Current utilisation of equipment in my organisation is typically:



For my organisation, international decommissioning work (outside of the North Sea) represents:



What do you think about the ability of the decommissioning industry to effectively meet demand in the coming 10 years?



Feedback Overview

The general sentiment appeared to be one of concern and demand for change.

There were clear frustrations around perceived insufficient regulation, lack of resources, and the need for better collaboration, communication, and technological innovation within the industry.

Despite escalating competition, particularly from the renewables sector, respondents seemed positive about the potential for improvement through increased support, collaboration and innovation, and clearer guidance from regulators.

Feedback Top 5

1. Need for Better Regulation & Guidance (10):

Respondents voiced a need for better regulation and guidance in the planning and execution of decommissioning. This included clearer communication and timelines from the regulators, stricter enforcement, and better support systems.

2. Insufficient Capacity & Resources (9):

Concerns were raised about the shortage of necessary equipment, competent personnel, and onshore recycling facilities to support the increasing demand for decommissioning services, especially with expected growth in other areas like the renewables industry.

3. Increased Collaboration & Communication (8):

The desire for increased collaboration and communication across the industry were prevalent. This included the need for more engagement between operators and the supply chain, the sharing of lessons learned, and more transparency in planning and scopes of work.

4. Impact of Competition (7):

Competition, both within the industry and from renewable energy sectors, was seen as a significant challenge affecting pricing, availability of resources, and project execution.

5. Need for Innovation & Technology Development (6):

Responses indicated a marked need for innovation and technology development in the decommissioning process, including in areas like Well P&A and R&D. There was also a call for better support and investment for new technologies from operators.

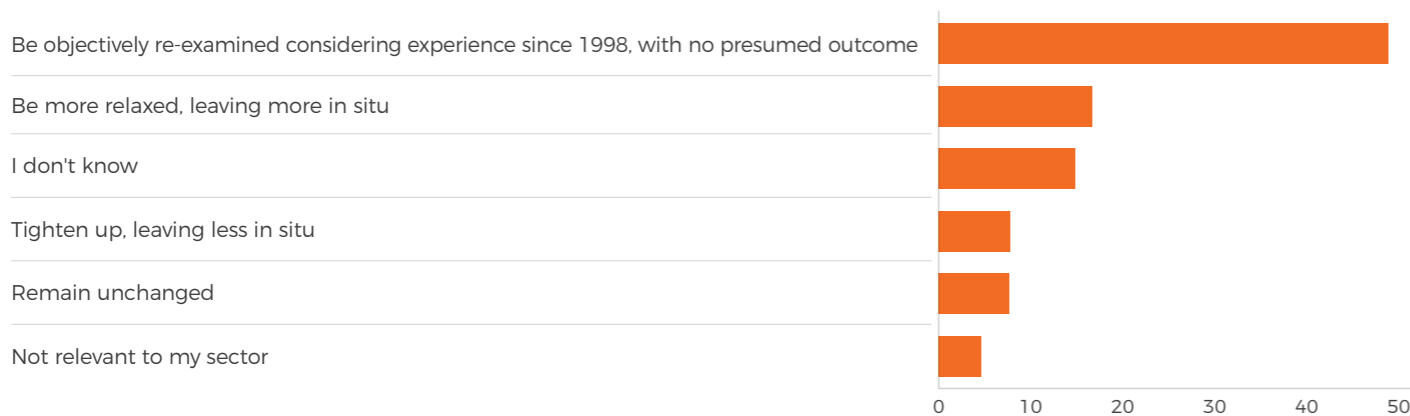
REGULATION

The regulation theme used two questions to determine the feelings of industry participants.

The first question is very specific: "In the context of oil and gas decommissioning in the North Sea, do you think the current provision for derogation within the OSPAR decision 98/3 should:" with answers ranging from re-examination through to remain unchanged. There is a clear answer with only a small minority believing it should remain unchanged. Almost half of the respondents felt it should be objectively re-examined with sizeable proportions also feeling it should be more relaxed or should be tightened up.

The question regarding the adequacy and effectiveness of regulators and regulations also provides a stark result. Half of the participants feel that both regulators and regulations are inadequate and require change. When looking at operators/asset owners alone, there is an even greater divide with a nearly 2:1 ratio feeling that both are inadequate. This is echoed heavily in the comments with a heavy focus on dissatisfaction towards the current regulatory environment.

In the context of oil and gas decommissioning in the North Sea, do you think the current provision for derogation within the OSPAR decision 98/3 should:

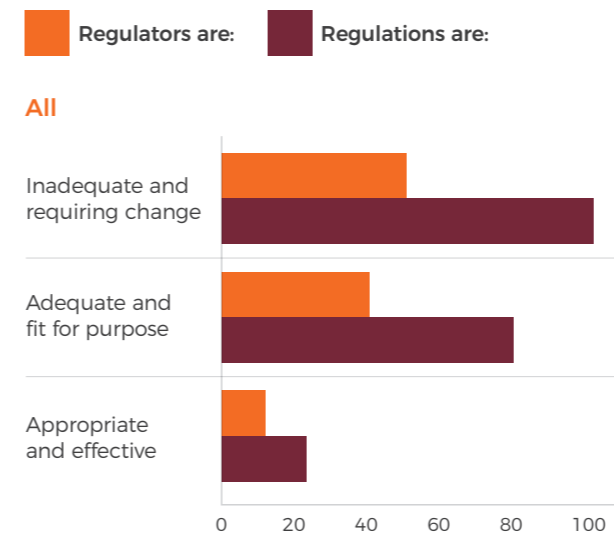


Full circle: decommissioning in the energy sector.

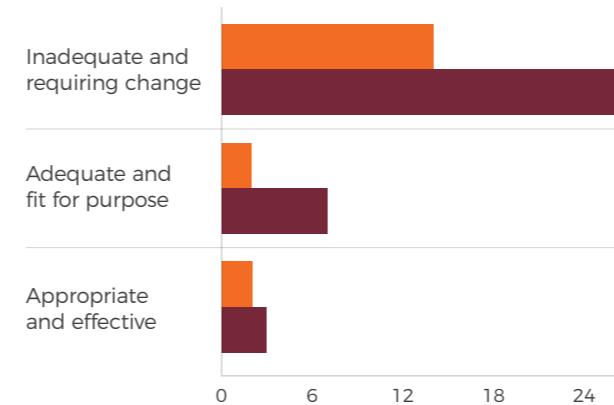
DECOM MISSION WORKS WITH BOTH THE REGULATED AND THE REGULATOR. RARELY DO WE SEE FAILURE, BUT CHANCES FOR IMPROVEMENT DO EMERGE."

Callum Falconer
Decom Mission, Operations Director

For decommissioning activities in my sector:



Operator/Asset Owner



Feedback Overview

The general sentiment among respondents is of dissatisfaction and concern towards the current offshore decommissioning regulatory environment.

Employees express a desire for reform and more clarity in regulations, better and adequate guidance from regulatory bodies, and consideration for the national economic impact.

There are also shared concerns about the perceived undue influence of operators on regulatory decisions, and a call for global standardisation and harmonisation of regulations for better operational efficiency and preparedness.

Feedback Top 5

1. Need for Regulatory Reform & Clarity (13):

Many respondents spoke about the need for regulatory reform, expressing concerns about outdated rules, inconsistency in regulatory enforcement, and the need for clarity. They believe changes should reflect lessons learned over the years and consider potential future developments.

2. Inadequate Regulatory Guidance & Support (10):

Employees felt that regulatory bodies are not providing sufficient guidance and support to organisations. This was considered particularly problematic during the attempts to challenge norms or pioneer beneficial outcomes due to a perceived passive role of regulatory agents.

3. Regulatory Impact on National Economy (9):

Respondents frequently mentioned the impact of regulatory decisions on the UK economy, especially in relation to offshore decommissioning work being conducted or awarded abroad. They expressed the concern that this not only impacts sector-specific growth but also reduces the overall value for UK taxpayers.

4. Operator Pressure & Influence (7):

A number of responses highlighted what appears to be a disproportionate amount of influence by operators on regulators. Questions were raised about integrity and accountability, with some believing that regulators often side with operators to the detriment of other stakeholders.

5. Need for Global Harmonisation & Standardisation (6):

Respondents believe there is a need for more globally standardised regulations, arguing that current offshore decommissioning regulations are too fragmented and inconsistent. They proposed harmonisation to allow for greater preparedness, efficiency, and reduced ambiguity in compliance and enforcement.

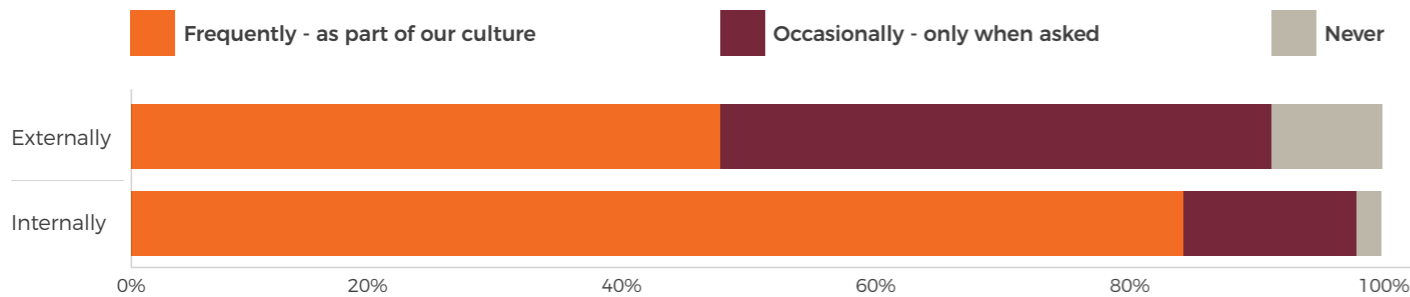


The regulation theme used two questions to determine the feelings Safety is the highest scoring theme across the survey with all questions scoring consistently well.

Each of the five Likert Scale questions concerning raising issues (0.93), safety training (0.87), safety prioritisation (0.86), safety culture (0.85) and leadership (0.84) are the highest scoring questions across the survey and give a picture of an industry that is safety focused throughout.

The additional question was regarding sharing project safety learnings, and this too scored positively with almost all participants responding that sharing was done internally either frequently or when asked suggesting this is a cultural norm. If there is an area to work on with regards to sharing, it may be around sharing externally where only half of the participants said this is done frequently – this echoes other similar surveys where sharing across organisations is still only embedded informally and not done consistently.

My organisation shares project safety learnings:



SAFETY IS AN ABSOLUTE IN HIGH HAZARD INDUSTRIES. IT IS REASSURING TO NOTE THAT THIS IS REFLECTED IN THE SCORES GIVEN HERE.”

Sam Long
Decom Mission, Chief Executive Officer

Average Scores by Question



Feedback Overview

Compared to the high-scoring questions, the general sentiment in the open text comments highlighted concern that safety, especially in terms of decommissioning, is often overshadowed by cost considerations.

There is a strong call for a more thorough and proactive approach to safety, more open dialogue and sharing of experiences, and for decommissioning to be considered even at the design stage of assets.

However, the sentiment towards the lacklustre attention given to environmental safety was particularly negative.

Feedback Top 5

- 1. Safety throughout Decommissioning Programmes (13):**
The emphasis on safety through the entirety of decommissioning programmes was a recurring theme. This includes the initial planning stage to final execution, recognising that these projects inherently have unique safety challenges.
- 2. Importance of HSE and its Positioning (10):**
Respondents frequently raised concerns over the positioning and emphasis on Health, Safety, and Environmental (HSE) matters. They noted its importance but felt it was often secondary to cost considerations.
- 3. Learning from Experience, Opportunities for Dialogue & Sharing (8):**
There was discussion regarding the need to learn from previous incidents and best practices to minimise accidents during decommissioning. Respondents suggested more dialogue and sharing across the sector.
- 4. Environmental Safety Concerns (4):**
Alongside safety for workers, the environment is another priority. Some respondents expressed concern that environmental safety seems to be less prioritised in decommissioning decisions.
- 5. Safety Culture (6):**
Some noted the significance of maintaining a strong safety culture in all organisational aspects including decommissioning.

FINAL THOUGHTS

The general sentiment among respondents appears to be mixed. While there is clear interest and engagement in the subject of offshore decommissioning, there is also a sense of frustration over perceived gaps in market intelligence, regulatory clarity, and collaboration within the industry.

Many respondents express a desire for proactive measures, more structured planning, and calls for innovation, but there also seems to be a level of disappointment with the existing measures and challenges in decommissioning practice.

Some participants also communicate concern for the environmental implications in decommissioning processes.

Feedback Top 5

- 1. Need for More Market Intelligence & Forecasts (13):**
Several respondents identified the need for more detailed and up-to-date market information, including updates on regulatory changes, forecasts of decommissioning activity, and information on projects and stakeholders. Greater visibility on the supply chain and its opportunities would also be beneficial.
- 2. Desire for More Clarity from Regulators (12):**
Responses indicated a desire for clearer guidelines and proactive measures from regulators. This included calls for well-structured decommissioning specifications, more detail on regulatory deadlines and consent dates, and a robust regulator to oversee decommissioning in the North Sea.
- 3. Importance of Knowledge Sharing & Collaboration (9):**
Participants emphasised the importance of greater collaboration and knowledge-sharing. This implies cross-industry communication, information sharing on decommissioning projects, as well as feedback and early engagement with new asset owners.
- 4. Focus on Technology & Innovation (7):**
Some respondents expressed an interest in future technology developments designed to reduce emissions and costs, along with the need for more accessible technology in onshore operations. They also mentioned leveraging technology to achieve cost reductions.
- 5. Holistic Approach to Decommissioning Planning (6):**
Several responses underscored the need for decommissioning planning to be incorporated into the design basis for new projects. This would involve working with operators, investors, and government to consider the cost, timing, and specifications of decommissioning in the early stages of a project, potentially reducing decommissioning challenges for future generations.

SURVEY CONCLUSIONS

I value the independence afforded Decom Mission by its members and its stakeholders. It is important that we feel both empowered and informed enough to be the voice of these activities, which are key to a successful and just Energy Transition.

The Annual Survey is intended to ensure that we reflect our community. Findings here, such as the absolute commitment to safety and highlighted issues surrounding people and practice also help us focus future activity and realise improved outcomes. We look forward to repeating this exercise in 2024 and contrasting the two datasets.

Sam Long Chief Executive Officer

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KEY THEMES

QUESTIONS

Commercial:

Challenge on margins; cashflow and debt are manageable

Confidence:

Focus on upstream oil and gas; mixed views on EPL

Contractual:

Issues with EPRD market fairness

Environment:

Limited expertise, willingness and commitment

People & Skills:

Challenges retaining and attracting talent

Project Execution:

Lack of effectiveness meeting demand; significant R&D investment required

Regulations:

OSPAR 98/3 decision should be objectively re-examined

Safety:

Positive culture, training and leadership

COMMENTS

Commercial:

Budget constraints and cost reductions

Confidence:

Concerns about delays and deferrals

Contractual:

Need for improved early planning and contract strategies

Environment:

Rigs to reefs

People & Skills:

Need for specialised training programmes

Project Execution:

Need for better regulation and guidance

Regulations:

Need for regulatory reform and clarity

Safety:

Safety throughout decommissioning programmes

COMMENT THEMES (OVERALL)

Regulatory Challenges & Inefficiencies (22 mentions):

"The industry is heading toward a lowest price wins environment which is dangerous, and will drive unsafe operations and shortcuts."

Supply Chain Capacity & Skills Gap (16 mentions):

"There is a shortage of people looking at decommissioning as a career path and a shortage of training programmes under Masters in Decommissioning."

Lack of Visibility & Uncertainty in Work Pipeline (14 mentions):

"A continuing lack of certainty over timeframes and the volume of work going to the European mainland will continue to be problematic in retaining people in decom."

Cost Reduction versus Quality & Safety (13 mentions):

"Cost often outweighs environmental outcomes. Recycling of steel seems to be one of the few positive metrics focused on as it is easy to achieve."

Need for More Training & Education (11 mentions):

"The perceived lack of longevity in roles in decommissioning is a blocker to people taking up roles."

Environmental Considerations & Circular Economy (10 mentions):

"There is a wider picture when considering overall environmental impact of total removal."

Operator & Government Engagement (7 mentions):

"Regulators are not easy to work with, they don't help supply chain, they only seem to appease the operators."

Offshore versus Onshore Focus (6 mentions):

"This topic does not receive enough attention. A survey for onshore waste management should be considered."

Rigs to Reef Controversy (5 mentions):

"Rigs to reefs is a concept promulgated by people with interests served by not removing the infrastructure."

International Competition & Market Dynamics (4 mentions):

"UK has the capability to execute, but too many UK projects are being lost to EU companies."

COMMENT THEMES (OVERALL)

1	I have confidence that I can freely raise a safety issue in my organisation	Safety	0.93
2	Safety training provided by my organisation meets recognised industry standards	Safety	0.87
3	Safety is the #1 priority when my company is planning/executing decommissioning projects	Safety	0.86
4	The safety culture in my organisation results in the highest-level of safety outcomes	Safety	0.85
5	Our leadership team show a consistently high understanding of process safety leadership across all our activities	Safety	0.84
6	I see myself still being part of the decommissioning industry in five years time	People & Skills	0.71
7	Within the oil and gas industry, rigs to reefs, as practiced in Gulf of Mexico, whereby items are deposited on the seabed, should be adopted in more regulatory jurisdictions	Environmental	0.59
8	If more time was invested in bidding and contracting, outcomes would improve	Contractual	0.58
9	I consider the margin my company receives for the decommissioning work it has won to be fair and reasonable	Commercial	0.51
10	In my organisation, there is a gap between the skills available and the skills needed to meet the demands of the decommissioning industry	People & Skills	0.49
11	Within my experience, published outturn reports accurately reflect project outcomes	Proj. Execution	0.47
12	The Engineer Prepare Remove Dispose (EPRD) contract model creates a fair market where the supply chain can effectively compete	Contractual	0.45
13	There is a notable decrease in experience/skills among individuals in the decommissioning industry every year	Proj. Execution	0.44
14	The decommissioning industry in its current form is effective at meeting existing demand	Proj. Execution	0.38
15	The industry requires significantly more Research & Development to provide innovative tools that will make decommissioning safer and more efficient	Proj. Execution	0.33

APPENDIX: COMMENT SENTIMENT

Theme	Survey Order	Response Vol. Order	Response Difference	Comments	Sentiment	Negative	Neutral	Positive
People & Skills	1	1	0	48	-0.29	24	14	10
Proj. Execution	2	2	0	45	-0.51	26	13	4
Contractual	3	3	0	35	-0.37	17	14	4
Safety	4	8	-4	16	-0.60	14	4	2
Environmental	5	6	-1	25	-0.48	16	5	4
Commercial	6	7	-1	20	-0.75	15	5	0
Regulation	7	4	3	33	-0.61	24	5	4
Confidence	8	9	-1	12	-0.75	9	3	0
Final Thoughts	9	5	4	27	-0.19	6	20	1

Full circle: decommissioning in the energy sector.



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