

OFFSHORE WIND SUPPLY CHAIN CONFIDENCE SURVEY REPORT

1st December 2022 | Alexandra Connon

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EXECUTIVE SUMMARY

The Offshore Wind Supply Chain Confidence Survey, undertaken by the Offshore Renewable Energy Catapult between the end of September and early November to establish a benchmark by which to measure future progress, polled 279 companies currently focussed on meeting the demands for innovation from the expansion of the UK's offshore wind industry.

Respondents were broadly split between the renewables (38%), oil & gas (27%) and other sectors (35%).

Confidence in the offshore wind industry to provide supply chain growth opportunities has increased in the past year. Understandably, companies in the renewable energy sector are more confident as they continue to invest time and resources into the development of the sector. Despite a number of challenges highlighted, the majority of companies from other sectors also cited an improvement in confidence about the future growth of their business in the offshore wind (OSW) market over the past 12 months.

Maintaining a skilled technical workforce was highlighted as a potential challenge to future growth. Survey findings indicate that renewable energy companies are struggling to recruit, and the majority believe this issue is negatively affecting the growth of their organisation. The demand for a competent and experienced workforce is likely to increase further as the industry aims to deliver on ambitious net zero targets.

Companies within the O&G sector are facing a similar issue which raises an important consideration. Previously, it was assumed that the shortage in the renewable energy sector could be alleviated through a skills transition, where O&G employees would find work in the offshore wind industry, given the partially transferrable skillset. However, the majority of O&G respondents have indicated that the availability of a skilled workforce is also limiting the growth of their industry. This will further increase the strain on the demand for skilled workers in the OSW industry.

Visibility of opportunities is a consistent and prevalent theme throughout the survey responses. Respondents from all sectors outside of renewables indicated that they want greater visibility of relevant future opportunities in offshore wind. They reported that there is significant scope to provide additional information to support and facilitate their entry into the sector.

ORE Catapult offers supply chain support through different programmes including Launch Academy, Fit 4 Offshore Renewables and the offshore wind industry funded Offshore Wind Growth Partnership (OWGP), as highlighted in greater detail in the appendix.

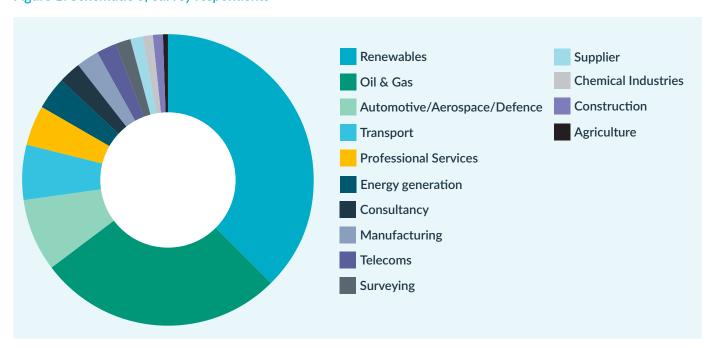
INTRODUCTION

The survey, compiled and distributed by ORE Catapult, was open to all UK offshore wind supply chain companies which resulted in representation from a wide range of sectors, including oil & gas, aerospace, defence, surveying, construction and transport, as shown in Figure 1. The aim of the survey was to gain better insight into the challenges faced by the supply chain in developing innovation to meet the needs of the offshore wind industry and to set a benchmark for the level of its confidence in future growth in the sector.

In total, 279 companies took part in the survey. Of these, 38% were from the renewable energy industry which included mainly offshore and onshore wind. 27% of

respondents came from the oil & gas sector. The size of companies who participated in the survey varied across all sectors. The majority of respondents, at 63%, were small companies with less than 100 full-time equivalent employees (FTEs). 22% of respondents were companies with between 100-400 FTEs, while 12% of the survey demographic were made up of companies with more than 500 FTEs. Overall, the majority of participants had between 2-5 years of experience in the offshore wind industry.

Figure 1: Schematic of survey respondents



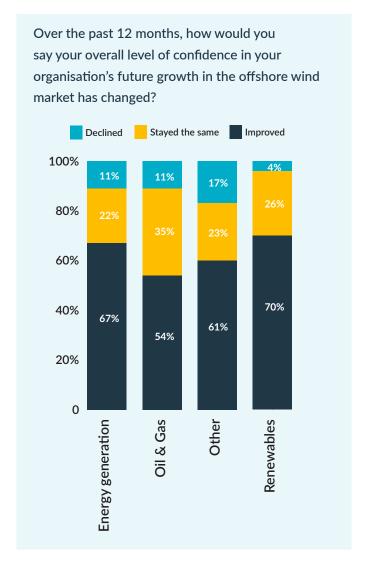
SURVEY RESULTS

CONFIDENCE IN FUTURE GROWTH

Despite the barriers that have been highlighted, the past year has seen a general increase in confidence in sector growth in the offshore wind market as shown in Figure 2. Understandably, companies within the Renewables sector are confident in future growth as they continue to invest time and resources into furthering the development of the industry.

Within the O&G sector, companies are mainly confident regarding their involvement in the future growth of the sector, with the majority of respondents citing an improvement in overall confidence over the past year. Progressing forward, the offshore wind industry should aim to provide more opportunity to the O&G sector, and companies from other sectors looking to become involved in offshore wind. The introduction of the INTOG leasing round, which is aimed directly at supporting projects to reduce emissions from the production of oil and gas, should further increase confidence in the growth of the O&G sector in offshore wind.

Figure 2: Confidence in sector growth in offshore wind market



IDENTIFIED BARRIERS TO GROWTH

Skilled Workforce

Survey respondents were presented with a number of statements regarding areas such as skilled staff recruitment and retention, and funding required to support future growth plans. One challenge that was highlighted was in regard to recruiting staff with appropriate skill levels. Upon comparing responses from both the oil & gas (O&G) and energy generation industries, it is clear that the renewable energy sector is struggling to a greater extent to recruit skilled staff (Figure 3). The requirement for specific technical expertise and experience, combined with the rapid growth of the renewables industry, is resulting in a shortage of skilled workers. Additionally, as indicated by a number of respondents from the renewable energy sector, the completion of Brexit in the UK has introduced difficulties in attracting workers from EU countries as a result of issues surrounding work permits and visas.

This issue surrounding recruitment of skilled workforce was reinforced in a comment provided by a respondent, where they stated that:

"Skills is the biggest barrier" and further commented that the hiring of skilled personnel is "not growing fast enough with the level of growth in the industry".

Interestingly, responses from the O&G sector have also indicated an issue in recruiting skilled workers. This raises an important consideration. Previously, a just skills transition has been highlighted as a potential solution to the shortage of skilled workers, where employees from the O&G sector could transition to the offshore wind (OSW) sector, given the relatively similar required skillset. This idea was supported in recent years by a survey which reported that 75% of O&G workers would be willing to

Figure 3: Recruitment and retainment of skilled staff

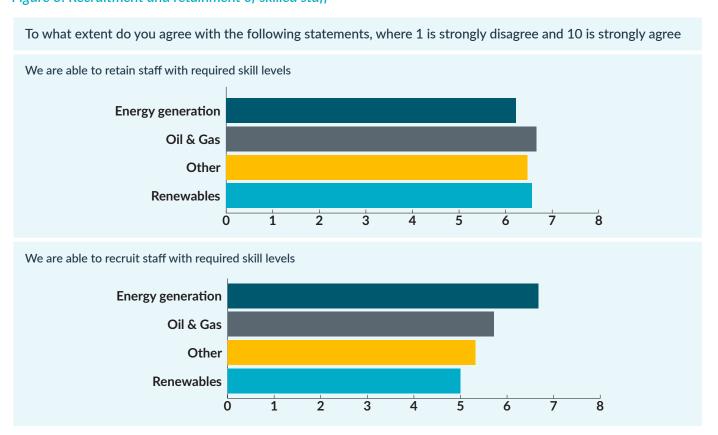
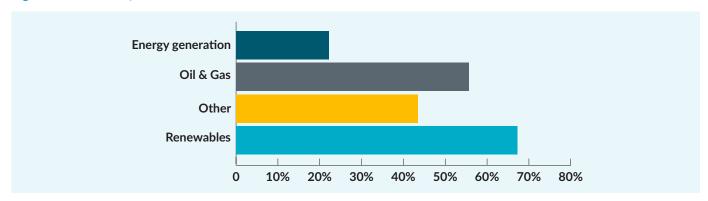


Figure 4: Availability of skilled technical workforce



transition to the renewables industry¹. However, as Figure 4 shows, the majority of respondents from the O&G sector also consider the availability of a skilled workforce as a barrier to their organisation's growth, highlighting that, whilst a just transition from one to the other is possible in the longer term, it may prove more challenging in the short to medium term.

Visibility of Future Opportunities

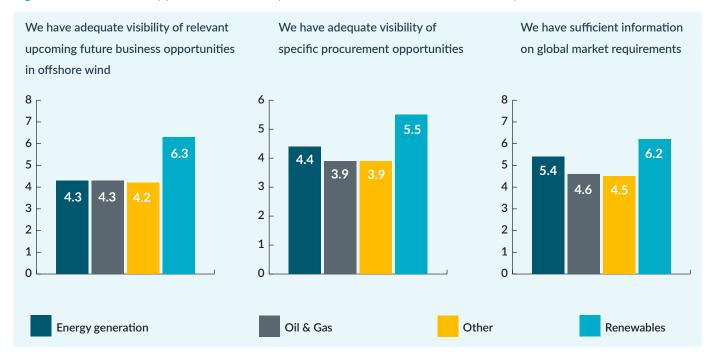
Another potential barrier to growth highlighted in the survey responses was visibility of opportunity in the offshore wind industry. Companies from sectors beyond renewables indicated that they do not have adequate

visibility of relevant future opportunities in offshore wind. Similarly, they feel there is insufficient information available to them regarding market requirements for entering the offshore wind industry, as depicted in Figure 5, where 1 is strongly disagree and 10 is strongly agree.

Comparable conclusions were highlighted when companies were asked to assess any potential barriers to their organisation's growth. In particular, the energy generation sector reported on the lack of understanding of market opportunities and dynamics as a significant hindrance, as shown in Figure 6.

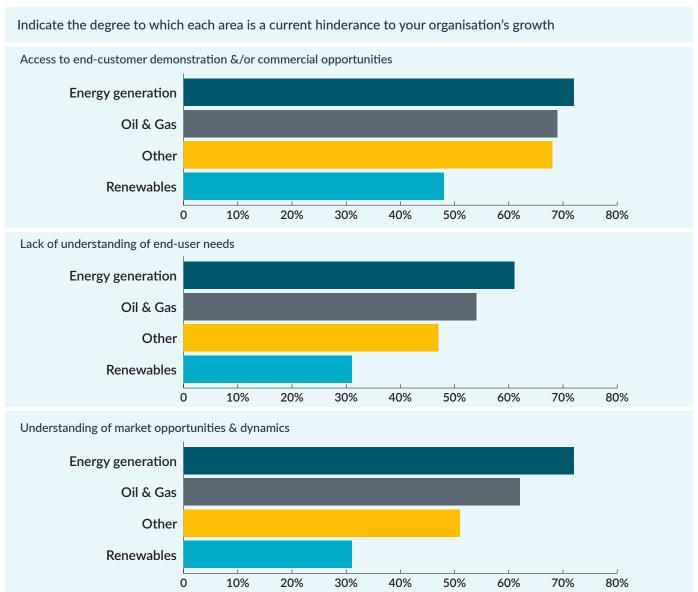
A similar view was highlighted from companies within the O&G sector, most notably regarding access to commercial

Figure 5: Feedback on opportunities and requirements in the offshore wind industry



¹ Offshore workers face 'significant barriers' to switching jobs - BBC News

Figure 6: Barriers affecting growth of organisations



opportunities. A comment from a company in the O&G sector further highlighted the issue of opportunity by stating:

"Being able to find suitable opportunities to bid for work is the main obstacle for us."

Similarly, another company from the O&G sector commented that:

"We have found continual difficulty in accessing the renewables industry even though our skills in the Oil & Gas Industry are directly transferable".

However, these were by no means wholly consistent views, and many companies were keen to emphasise how well they are able to engage with the opportunities from offshore wind:

A respondent from the renewables sector:

"OWGP and ORE-C have been instrumental in providing support and expertise to get the company to where it is today."

A respondent from the O&G sector:

"We have been well supported by ORE, OWGP and DeepWind [...] We have developed some potentially good relationships with some key players in the offshore wind market and hope to see some actual paid work within the next year"

A respondent from the 'Other' sector:

"We are significantly involved with many organisations across the Tees Valley, the UK and to an extent the world so have a good support system."

Some companies in the O&G industry identify a lack of standardisation in the offshore wind sector as the reason behind the difficulty in accessing the offshore wind market. They suggest that this may be due to purchasers choosing lower-specification products in an attempt to reduce costs, although it should be recognised that requirements between the different industries are not always the same and may not require the same level of specification.

This same issue surrounding understanding of opportunity was also highlighted by companies outside of the oil and

gas sector. A respondent who works alongside companies looking to access the renewables industry commented that:

"The companies always struggle with lack of knowledge about the sector, and how to access it."

Similarly, another company from the 'Other' group of respondents stated that:

"We know we are capable, and that there are plenty of opportunities – however without knowing or understanding the OW [offshore wind] business landscape we struggle to spot them in time to engage properly."

Compared to companies already operating in the offshore wind industry, it is clear that O&G and other sectors are being affected by lack of visibility of opportunities and a lack of understanding the market. Both of these factors are limiting their transition into the offshore wind industry. A greater emphasis should be placed on informing these parallel and complementary sectors of the opportunities available to them in the market and what will be required of them to become a part of the offshore wind supply chain.

FURTHER CHALLENGES

Comments provided from respondents highlighted other issues surrounding the development of the offshore wind supply chain.

A company from the renewables industry suggested that:

"It would be helpful if the Government regulatory environment could provide stability for investment and if they could speed up policy implementation." Within the energy generation sector, one company suggested that:

"The tender rules may need to change to allow better competition and allow SMEs to grow."

The additional comments and suggestions were collated into a word cloud as shown in Figure 7, which indicates the main areas of conversation that have been highlighted in the survey responses.

Figure 7: Word cloud



ENABLING RECOMMENDATIONS

Skills

Our survey has identified a skills shortage which presents a barrier to realising the tremendous pipeline ambition in the UK. As a result of this, and in recognition of the similar crunches faced in adjacent sectors like oil and gas, offshore wind needs targeted skills development initiatives, aiming to address gaps in the most pressing area, and should be informed by OWIC and Renewable UK's valuable work for the Skills and Workforce survey 2023.

Further, enhanced public/private sector sponsorship of targeted Doctoral and Masters programmes in offshore wind can help to address longer-term technical skills gaps. Two such programmes are currently seeking sponsors and applicants through to mid-January (links below).

Market visibility and awareness

Enhanced visibility of market opportunities around the deployment of future offshore wind developments should be rapidly addressed to provide greater supply chain confidence. A single, national portal populated by

every project developer with upcoming procurement opportunities should be established as soon as possible.

Developers and high tier suppliers could further empower supply chain companies to meet market demand through enhanced direct engagement, and not only when Procurement tenders are live, to get across more regular and generic project and industry information, challenges etc.

Increased investment in tailored programmes to facilitate transition into offshore wind from other sectors - this could include:

- o Technology transfer support
- o Access to bespoke market intelligence
- Supply chain readiness and procurement advice

These could be delivered through existing ORE Catapult and OWGP initiatives that have proven highly effective in driving productivity improvement, supporting funding and investment and accelerating technology development.

https://www.idcore.ac.uk/news/20221027/idcore-now-recruiting-industry-partners-2023 https://auracdt.hull.ac.uk/



APPENDIX

ORE Catapult deliver the following programmes to support the development of the offshore wind supply chain:

Launch Academy is ORE Catapult's technology accelerator, delivered nationally and regionally, breaking down barriers to commercialisation for game-changing companies and accelerating technologies time to market. Launch Academy works with industry to set relevant technology challenges, guaranteeing market-pull, and delivers 9-months of support with leading professionals working alongside in-house experts to accelerate companies' journeys to market.

Fit 4 Offshore Renewables is ORE Catapult's supply chain excellence programme, helping companies achieve the highest standards, win work in offshore renewables and successfully transition from other sectors. Fit 4 Offshore Renewables is measured on companies' success in winning contracts in the industry and has been instrumental in many business's targeted efforts to secure more work in offshore renewables.

The offshore wind industry funded **Offshore Wind Growth Partnership (OWGP)** is a 10-year programme, delivering funding to companies through grant funding activities and business transformation support. A number of programmatic activities are delivered through OWGP to transform businesses, increase capability, and improve competitiveness:

- WEST (Wind Expert Support Toolkit)
- F4OR (Fit 4 Offshore Renewables)
- SIG (Sharing in Growth)
- Innovation Grants
- Development Grants

Regional economic growth programmes, such as TIGGOR in Northeast England deliver targeted regional funds into local companies, helping them to de-risk technology development and access the right expert advice to grow local economic impact and supply chains through bringing new products and services to fruition.



GLASGOW	BLYTH	LEVENMOUTH
ORE Catapult	National Renewable	Levenmouth Development Turbine
Inovo	Energy Centre	Energy Park Fife
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Glasgow	Albert Street	Leven
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GRIMSBY	ABERDEEN	CORNWALL
O&M Centre of Excellence	Subsea UK	Hayle Marine Renewables
ORE Catapult, Port Office	30 Abercrombie Court	Business Park
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Bridge Innovation Centre	Lan Se Zhi Gu No.15	Wilde Street
Pembrokeshire Science &	Ke Ji Avenue	Lowestoft
Technology Park	Hi-Tech Zone	Suffolk
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