



Survey of international activity in the oil and gas sector 2018/19



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Scottish Enterprise foreword



David RennieGlobal Head of Energy,
Scottish Development International

Our annual Survey of International Activity in the Oil and Gas Sector provides a comprehensive set of data, information and insights on trends in the sector, which has enabled us to compare these trends year on year over the last 19 years.

This edition covers the 2018/19 financial period and while the survey results require us to look back, we also need to take account of current matters. The impact of the global pandemic COVID-19 and the related fall in oil price, and lower gas price has changed the oil and gas arena dramatically. When the survey was undertaken, many companies were expressing a positive outlook for their future, but are now presented, yet again with significant challenges.

While the impact of the current situation is clear, we do need to, and this is of course difficult, recognise the importance of remaining international in outlook and ensuring that our supply chain can continue to maximise the international opportunities that do exist. There are a few positive results worth highlighting.

Firstly, the 2018/19 period, while still fragile in many ways did indicate a slight improvement in terms of sales from the Scottish supply chain. International related sales in the year in question rose by over 12% to stand at £10.9bn. And for the seventh year in a row, international related activity accounted for over half of total supply chain sales. This shows that despite all the challenges that have faced, and continue to face the supply chain, it remains international in its focus and performance.

It is also interesting to note, that although down on the previous year, non-oil and gas markets account for over a fifth of total supply chain sales, a trend which is bound to accelerate. It is also interesting to note that the results indicate that many companies are seeking to increase business in non-oil and gas markets rather than seeking to replace income lost elsewhere; in other words companies are seeking to diversify for positive reasons, to take account of new opportunities and new markets as we move into the transition period towards a low-carbon economy. In the recent words of the boss of BP, Bernard Looney, "oil and gas, which will make up a share of our energy mix for some time ahead albeit in changing ways, will be an "engine of value creation" that would help that transition journey." Our supply chain, heavily international and driven by people and technology with a track record of innovation, has the capability and opportunity to help deliver the solutions and projects to help that transition. We now have an energy supply chain, not just an oil and gas one, an important point in terms of attracting people to work in our industry.

Scottish Development International works with hundreds of energy companies, assisting and advising on overseas trade, even in the current situation, through market research, connections with decision makers, hosting webinars and using our Globalscots for example. We are ready to help companies win business.

Finally, as ever my thanks to all those companies who responded to the survey and of course to Aberdeen and Grampian Chamber of Commerce who pulled all those responses into what I hope is an insightful read.

Executive summary

This is the 19th year that Scottish Enterprise has published an annual benchmark of international activity in the Scottish oil and gas supply chain. This research report is independently administered by the Research team at Aberdeen and Grampian Chamber of Commerce (AGCC). Fieldwork for this research was conducted between November 2019 and January 2020 with the financial data relating to the 2018/19 year.

Main findings

£10.9bn

Total international sales from the Scottish oil and gas supply chain

£3.7bn export sales and £7.2bn sales from international subsidiaries



54.8%

International activity accounted for 54.8% of total sales

Companies reported operating across



different countries internationally



Top growth countries for the immediate future include the USA, Norway and the UAE



of respondents are 'very' or 'somewhat' optimistic about the next two years



15% growth in Scottish **domestic** oil and gas

12% growth in Scottish oil and gas direct export sales

5% growth in sales via international subsidiaries



1. Introduction

This report aims to provide an overview of Scotland's international oil and gas activity. Financial data on the industry has been used to assess the scale of the sector in 2018/19.

Our wider analysis also allows us to reveal:

- International markets and target countries in the future
- Approaches to diversification
- Reasons for market withdrawal
- Perceptions of supply chain competitiveness
- Forecast growth over the next two and five years

We would like to thank all the companies who have supported this research by responding to our survey. This year's respondents represent over **35,000 employees** across the sector. Our surveys and desk research combined covers around **230 companies** in the sub-sectors shown in **Figure 1**.

Figure 1: The research responsesSource: AGCC

Integral and support services

35,000 employees represented by 228 companies

Reservoirs

Reservoirs



2. The scale of the sector in 2018/19

The chart below shows the data that we measure to estimate sales from the Scottish supply chain.

Figure 2: Break down of supply chain sales in 2018/19



The results of our latest research are shown in Figure 3.

Figure 3: The scale of the sector in 2018/19

Source: AGCC

Total sales by Scottish oil and gas supply chain companies 2018/19

£19.9bn

Of which domestic sales are

£9.0bn

Of which total international sales are

£10.9bn

Exports account for

£3.7bn

Of which oil and gas sales are

£7.07bn

Of which other sales are

£1.96bn

Of which oil and gas

£2.84bn

Of which other sales

£0.87bn

Overseas subsidiaries account for

£7.2bn



International sales accounted for

54.8%

of total Scottish supply chain sales in 2018/19

Supply chain trends

The scale of the oil and gas sector fluctuates and is understandably influenced by factors such as global oil and gas capital investment. Our research allows us to look at 2018/19 but also compare against recent trends as shown in the charts below. Following the declining trends recorded in the previous two years, it is positive to see growth across domestic and international sales in 2018/19.

Total supply chain sales

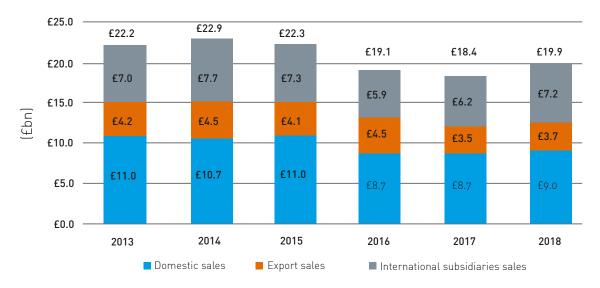


Total sales by Scottish oil and gas supply chain companies 2018/19 (Figure 4)

£19.9bn

(a rise of 8.5% since 2017/18)

Figure 4: Total sales by Scottish oil and gas supply chain companiesSource: AGCC



Percentages calculated prior to rounding

Total supply chain international sales



Total international sales by Scottish oil and gas supply chain companies 2018/19 (Figure 5)

£10.9bn

(a rise of 12.8% since 2017/18)

Figure 5: Total international sales (exports plus subsidiaries) by Scottish supply chain companies 2018/19



Please see Appendix B for more detail on the composition of the £9.7bn.

Figure 6: Total international sales (by sales type)



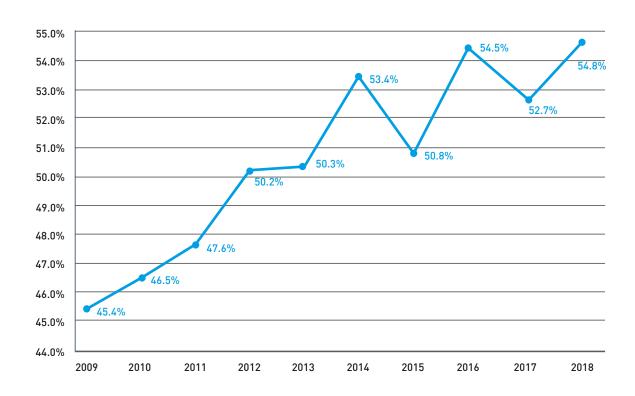
Total supply chain international sales



Our historic data reveals a positive overall trend line since 2009 with the latest data suggesting that the proportion of international sales of total sales is at the highest level recorded in this survey over the last ten years.

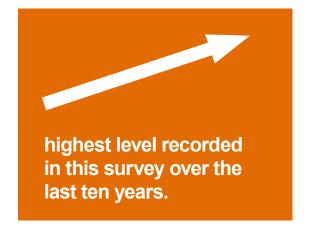
Figure 7: International sales as a percent of total sales

Source: AGCC



Key fact

The 54.8% of international sales came from 100 countries that supply chain companies report working in across the world.



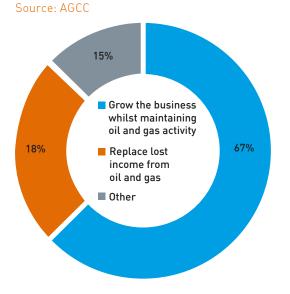
Diversification from Oil and Gas

The latest survey reveals a return in the percentage of sales from non-oil and gas sources to the levels reported in 2016. The £1.96bn of domestic sales and £0.87bn of export sales derived from non-oil and gas activity now comprises 22% of total sales, down from the 32% recorded in 2017 but in line with the 22% reported in 2016.



The most common reasons why companies have diversified away from oil and gas can be seen in Figure 8. For the majority of respondents (67%), the reason for diversification was to grow the business rather than as a replacement for lost income (18%). This is a higher proportion than was seen in 2018 (63%) and suggests that diversification is being considered as a profitable route to business growth rather than a reaction to the oil and gas downturn of 2015.

Figure 8: Reasons for diversifying from oil and gas



Other' reasons for diversifying included: taking advantage of an opportunity that arose and seeking to future-proof their Aberdeen business.

As has been the case previously, adapting their existing expertise / service offer to another sector was the most common form of diversification reported by respondents (see Figure 9).

67%

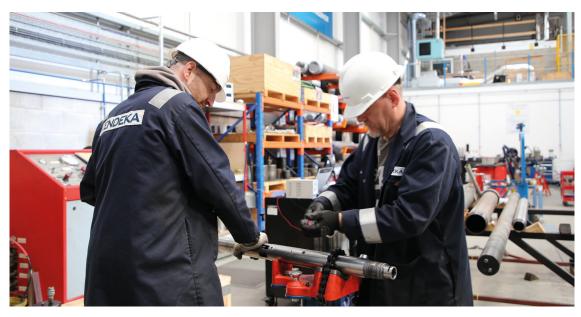
of respondents have diversified to *grow* their business not to recoup losses

"

"It is encouraging to see companies seeking to diversity for positive reasons, rather than seeking to replace income lost elsewhere, taking advantage of new opportunities and new markets as we move into the transition period towards a low-carbon economy."

David Rennie,

Global Head of Energy
- Scottish Development Internationa



copyright of Tendeka

Case Study:

Tendeka

Tell us a little bit about your company, what do you do and what makes you different?

Tendeka delivers advanced completions and production optimisation solutions for our clients' conventional and unconventional reservoirs. What makes us different is our commitment to research and development. We strive to innovate and provide new technologies to meet the challenges of the industry. Traditionally our business was around complex, horizontal well designs but more and more we are being asked to install our technologies into mature field environments to maximise economic recovery from existing wells. Headquartered within the Aberdeen area, we have an extensive global track record.

Where do you have offices based and since when?

With bases strategically placed across the globe, we are proud to provide our clients with the strength and resource of a global organisation, but with the speed, flexibility and customer focus of a local organisation. In 2010, we opened regional headquarters within Malaysia, the United States and Dubai to support our target areas, those where our technologies could really add value to our clients. We have local offices closer to our key clients within the regions, for example, in Norway, China, Australia, Russia and Canada.

Can you tell us about how your company has diversified internationally?

We've followed a very strategic and conservative approach to geographical

TENDEKA

diversification. As a reasonably small organisation, we didn't want to spread ourselves too thin and make commitments too early. We have participated in several of Scottish Enterprise / SDIs Trade Missions which have assisted with early analysis of new markets and used them as an opportunity to meet with clients, identify the opportunities and decide from there, whether to enter or not.

What made you decide to do this? What market research did you conduct beforehand?

We use various news subscriptions to keep up to date with international news, Scottish Enterprise Market Guides, and attend relevant events and conferences to gather market intelligence. We build up a list of key target areas based on current and future activity, and the suitability for our production optimisation solutions. We have also used Scottish Enterprise's free of charge research service to gain valuable insight into new areas.

How have your business values (i.e. those relating to competency, people, awareness and reputation) helped Tendeka when operating internationally?

It's great to have a wide range of clients in various global areas, with different reservoir challenges, requiring different technologies. It means we have a strong understanding of the global market, diverse track record and a more stable business going forward.

What has been your biggest business challenge when working internationally and how have you overcome this?

Our biggest challenge has always been during initial entry into an area when we have no local infrastructure. We try to team up with local partners to ensure we can support local operations and respond effectively to our clients.

Has your organisation enjoyed any advantages as a result of operating internationally whilst being based in Scotland?

We are very proud of our facility and capabilities within Scotland and the game-changing technologies that come from the team here. Certainly, having that UKCS origin and experience is held in very high regard by our clients internationally and gives them confidence that we will deliver a high-quality solution that gives them maximum return.

Has Scottish Enterprise assisted you with your international activity, and if so how?

Scottish Enterprise has helped us enormously with our international activity as described above. We have also received funding for positions which allow us to look and operate internationally which has been hugely important for our business and has generated quantifiable returns.

What are your company's goals for the next couple of years?

Tendeka's goals for 2020 / 2021 are a continuation on 2019 – to enter new markets with our innovative new technologies whilst remaining profitable. This forms part of our 2018-2023 strategy.

What one piece of business advice would you give to companies who might be looking to get into an international market?

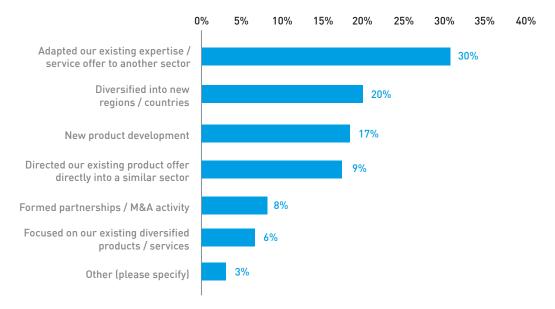
Do your research and don't be afraid to walk away if one area is not a great fit!

"Tendeka are such an exciting and dynamic company who are always amazing us with their new and improved, innovative technology. Tendeka are a shining example of the types of companies Scottish Enterprise/Scottish Development International work with on a daily basis in order to fulfil the true potential of their international aspirations."

Marion Murray

Scottish Development International, International Trade Specialist

Figure 9: How have companies diversified?





Future growth

In order to assess future growth aspirations, we asked companies a number of questions on optimism for the future, forecast growth and future plans for internationalisation. The fieldwork period for this research concluded in January 2020 therefore these forecasts represent a snapshot in time prior to COVID-19.

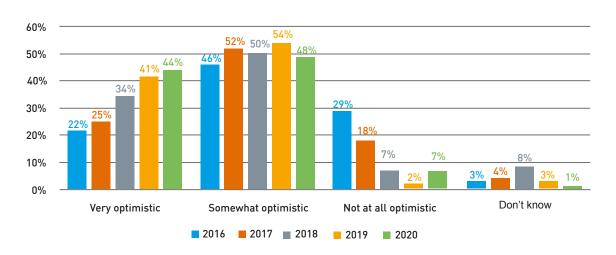
92%

of companies are optimistic about international growth over the next two years

Business optimism

The latest research reveals that business optimism over the next two years remains high, with 92% of companies reporting that they are 'somewhat' or 'very optimistic' and only 7% reporting that they are 'not at all optimistic'. The proportion of respondents stating that they are 'very optimistic' has continually increased since 2016.

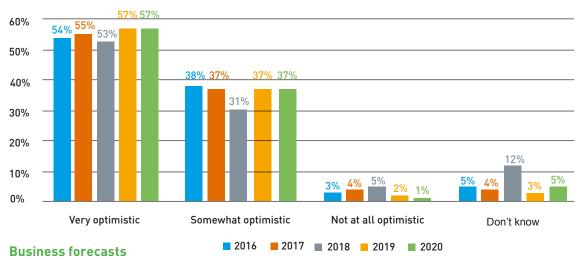
Figure 10: Optimism within supply chain companies – next two years Source: AGCC



Optimism over the next five years is similarly high, with 94% of companies reporting that they are 'somewhat' or 'very optimistic'. This is high level of optimism continues the trend seen since 2016, with a slight dip in 2018.

Figure 11: Optimism within supply chain companies - next five years

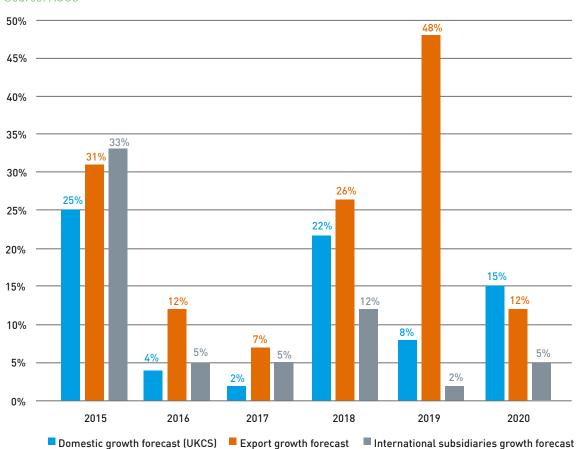
Source: AGCC



We asked companies for an assessment of growth in sales for domestic, export and subsidiary business over a five-year period. Based on the sales forecasts shared by respondents, the following levels of growth are anticipated in the Scottish supply chain over this period.

- 15% growth in the Scottish domestic oil and gas sales
- 12% growth in Scottish oil and gas direct export sales
- 2% growth in sales via international subsidiaries

Figure 12: Growth forecasts over the next five years





4. Future markets analysis

To consider future markets, companies were asked to state the countries which they viewed as their top growth countries for the immediate future and over the next five years. (1) A total of 69 different priority countries were mentioned by respondents.

Growth - Immediate future

Table 1 reveals the top ranked regions for the immediate future and how the rankings compare to recent years. The latest data reveals that the Middle East continues to be the top region for growth in this period. This is followed by Africa, North America and non-EU, all of which also ranked highly in the previous report. The EU has dropped down into sixth place, having previously been second in 2018.

Table 1: Change in growth regions – immediate future

Source: AGCC

| Region | 2017 report ranking | 2018 report ranking | 2019 report ranking | 2020 report ranking |
|----------------------------|---------------------|------------------------|------------------------|------------------------|
| Middle East | 1 | 1 | 1 | 1 |
| Africa | 2 | 4 | 2 | 2 |
| North America | 4 | 5 | 4 | 3 |
| Non-EU | 5 | 6 | 5 | 4 |
| Asia Pacific ² | 3 | 3 | 6 | 5 |
| EU | 6 | 2 | 3 | 6 |
| South America | 8 | 9 | 6 | 7 |
| Caspian | 7 | 7 | 8 | 8 |
| Australasia | 9 | 8 | 8 | 9 |
| Latin & Central America | 10 | 10 | 10 | 10 |

The top international country for future growth in the immediate future is Norway, followed by the USA and the UAE. This is the same top three as in the previous report, but with Norway overtaking the USA in the top spot. Further information on this is provided in Appendix D.

Down in ranking

Stayed the same

Up in ranking

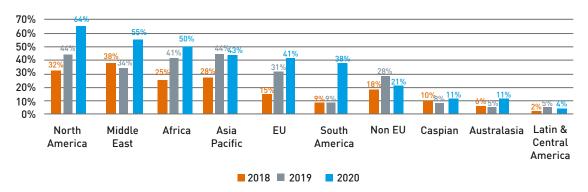
¹ Please note that the UK has been excluded as the focus is on international markets.

² As in previous years, the Asia Pacific and South-East Asia regions have been grouped for the purpose of this report.

Growth - Next five years

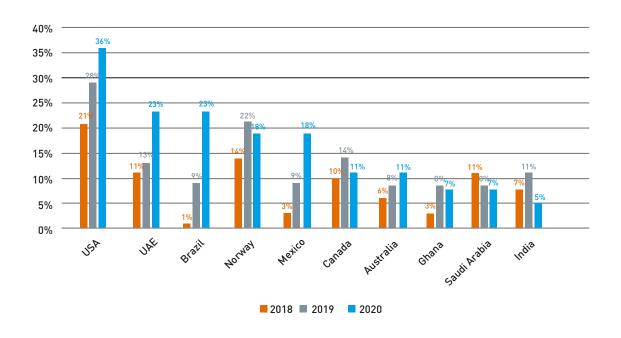
Looking further ahead, North America emerges as the top growth region over the next five years (see Figure 13), retaining its top position over the Middle East which had featured as the top growth region in the 2018 report.

Figure 13: Percentage of companies reporting the region as a growth opportunity in the next five years Source: AGCC



The top growth countries over the next five years are revealed in Figure 14. As was the case for the immediate future, USA once again emerges on top of the list of countries which companies are focusing on over the next five years.

Figure 14: Percentage of companies reporting country as a growth opportunity in the next five years Source: AGCC



Sub-sector focus in the immediate future

The figures below illustrate the future focus of different sub-sectors based on their growth countries for the immediate future.

Figure 15: Drilling and wells growth ambitions

Source: AGCC



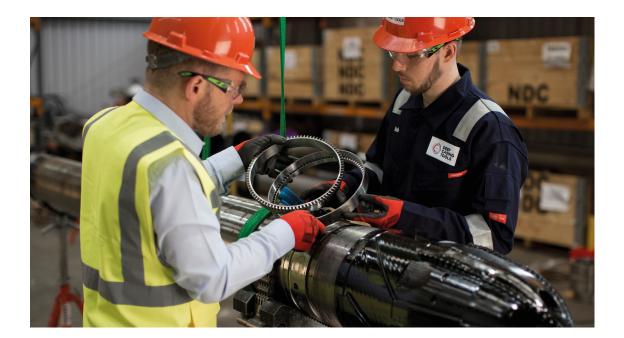
Figure 16: Marine, subsea and pipeline growth ambitions

Source: AGCC



Figure 17: Integral and support services growth ambitions





copyright of Deep Casing Tools

Case Study:

Deep Casing Tools

Tell us a little bit about your company, what you do and what makes you different?

We develop and commercialise technology for the oil and gas industry. We use a simple innovation methodology to make existing, trusted operations, more predictable and effective, in turn saving time and cost. Rather than reinventing the wheel, we are improving it's efficiency.

Tell us about your international capability, where do you have offices based and since when?

Prior to the 2015/16 downturn we had offices in Aberdeen, the UAE, Saudi Arabia, the USA and Canada. We have since closed the offices in the UAE, the USA and Canada, while strengthening our presence in Aberdeen and Saudi Arabia.

Can you tell us about how your company has diversified internationally?

In the last 3 years we have developed some new technologies for new sectors and new geographies. We have developed and are ready to commercialise technologies aimed at the Plug & Abandon and Slot Recovery markets, as well as products aimed at Norway, The UAE and the US Land markets. We have added local partners or agents to our network on a global scale, from Canada to Australia.



What made you decide to do this? What market research did you conduct beforehand?

Following the downturn, we had to diversify our product offering to survive, it was also essential for the growth of the company going forward. Myself and one or two others worked internationally for extended periods, I was 15 years overseas in The Middle and Far East. We based our diversification on our own knowledge and that of the many contacts we have around the world. As our majority shareholder is a private equity company with around 30 principal companies around the world, we have access to great local knowledge.

What have been the main benefits for your organisation of operating internationally?

It enabled us to survive during the downturn and has assisted with growing our business going forward. We are developing and introducing technologies on an international basis that we believe will offer huge value to the Operator. We are growing and diversifying our revenue stream, hiring a broad spectrum of people, while building entity value for the shareholders.

What has been your biggest business challenge when working internationally and how have you overcome this?

I suspect we are about to embark on our biggest challenge since the company was founded. COVID-19 is starting to have an effect on our lived and our business and I do not see it as a short-term problem. Over the last 2 years we have built a small team of local personnel in our key areas and established a network of trusted local partners, it is through these that we will overcome the immediate hurdle we are facing.

Has your organisation enjoyed any advantages as a result of operating internationally whilst being based in Scotland?

Yes, our company was founded here, our HQ and around 80% of our people are based in Aberdeen, Scotland.

Has Scottish Enterprise assisted you with your international activity, and if so how?

Somewhat, in the 3 years I have been with the company we have met periodically to look at potential funding for the development of technology. Though funding has not yet been received, we have received some good guidance. I have taken advantage of the Scottish Pavilion at both ADIPEC and OTC, which has been helpful.

What are your company's goals for the next couple of years?

We will continue to develop and introduce technology on the international stage. Our aim is to grow both nationally and internationally and recruit people to support this. As we are owned by a private equity business, our main aim is to build entity value, sell the business and deliver a return to the shareholders.

What one piece of business advice would you give to companies who might be looking to get into an international market?

Find the right partners, listen, understand, respect and take the plunge.



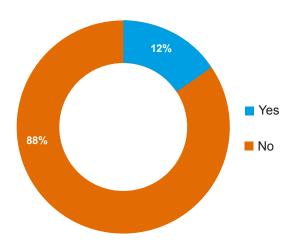
5. Challenges and constraints to growth

In order to assess challenges and potential constraints to businesses realising growth, the experiences of companies in the sector were considered.

Just over one tenth (12%) of companies reported withdrawing from any markets in the past year, lower than the proportion that withdrew in the previous year (18%).

Figure 18: Market withdrawal

Source: AGCC



12%
of companies reported market withdrawal last year which is the

lowest level recorded in the past five years

Reasons given for withdrawing from markets included issues with banking and payments as well as limited sales and inadequate returns on investments.

Reasons for market withdrawal – example comments

"Unreliable local support."

"International sanctions and difficulty of banking."

"Too difficult to get payment. Not worth the investment of time and resource."

"No sales in the last 12 months."

"Little returns for visits and marketing. Difficult to dislodge the opposition."

"Overly restrictive in the tendering process."

Supply chain competitiveness

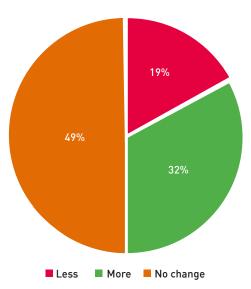
When asked about supply chain competitiveness, the smallest proportion of companies (19%) believed the supply chain has become less competitive in an international context over the past 12 months. This was followed by 32% who felt it had become more competitive and 49% who said that there had been no change in competitiveness over the past 12 months.

32%

of respondents think the supply chain has become more competitive in an international context over the past 12 months

Figure 19: Has the Scottish supply chain become more or less competitive in an international context over the last 12 months?





We then explored the reasons reported by those who felt that the supply chain had become more competitive. The main reason the supply chain has become more competitive is reportedly due to cost reductions and increased efficiency.



"Realisation that Scottish 0&G cost base is not sustainable. We have to reduce costs and be able to operate competitively in international markets which are traditionally surviving at a much lower cost base than the UK."

"Downturn has made the industry leaner, more efficient. Companies have contracted and removed a considerable amount of indirect expenditure."

Some respondents noted that the behaviour of the main operators is driving this:



"Operators continue to squeeze the supply chain yet make in general significant profits."

"Margins have been slashed by the major operators, squeezing the Supply Chain, and putting SMEs under tremendous pressure."

Although the largest proportion of respondents referred to costs or efficiency, other reasons included diversification / international growth and general response to the market downturn.

⁴ Please note percentages may not sum to 100% due to rounding.



"We have been driven to be more competitive due to local UK market conditions and the need to expand outside of the North Sea."

"Companies are having to look beyond the UKCS due to the decline in the domestic oil & gas industry."

"More companies are looking at the international market, so there is more competition when looking at services."

"Less work to go around will increase competition - this will be compounded by the need to look at climate change in the 0&G sector."

For the 19% who felt the sector was less competitive there were a range of opinions expressed. Some felt that costs are still too high in the UKCS supply chain while others worried that cost cutting measures had been too severe:



"Brexit fears"

"I have witnessed price increases of products that I am importing due to fluctuations in the value of the £. This then has a knock-on effect when I am selling on."

"People can operate and supply equipment and personnel much cheaper elsewhere."

"The impact of Brexit on the exchange rate has made us expensive."

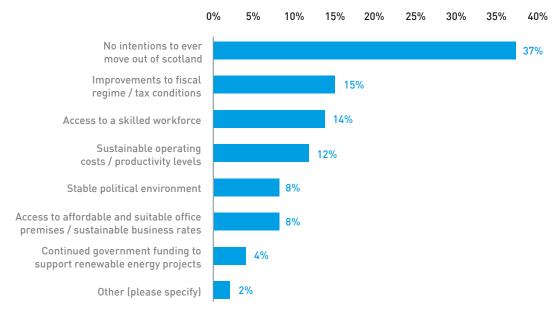
Stay or go?

Businesses were asked what one thing would encourage them to remain based in Scotland for the foreseeable future. Over one third (37%) of companies stated that they had no intention to ever move out of Scotland.

The most likely things that would encourage companies to remain based in Scotland are Improvements to fiscal regime / tax conditions (15%), Access to a skilled workforce (14%) and Sustainable operating costs / productivity levels (12%).

Figure 20: What is the one thing that would encourage your company to remain based in Scotland for the foreseeable future?





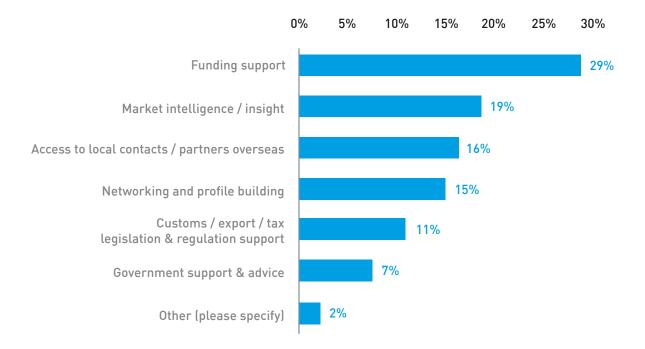


6. Concluding remarks from industry

6. Concluding remarks from industry

When asked if there was one thing that they could receive help aid their international / export activity, the largest proportion of companies (29%) said funding support. Other common responses included market intelligence / insight (19%), access to local contacts / partners overseas (16%) and networking and profile building (15%).

Figure 21: If there was one thing you could receive help with to aid your international/export activity, what would this be?



How can Scottish Enterprise / Scottish Development International help your business to diversify?

Financial support / funding

"Access to working capital, especially to cover bid and performance bonds, in the timeframe required to meet tender requirements (i.e. 4-6 weeks)."

"As a recent start up with considerable potential in the present, I would need funding to allow me kicking off all projects I have in my hands before these slip away."

"R&D funding support for offshore wind new technology."

Events and Networking support

"Assist with networking events outwith central belt."

"Continue to hold ONE information seminars on different regions - last one for Mexico was very good."

"Renewables is a sector that I believe we should do more business in, specifically Wind Power. A conference with some of the wind contractors working around the UK, may be beneficial for the Oil & Gas supply chain to attend & see what products are required."

"Introductions to potential growth areas. Currently we have no contacts."

The hydrogen industry offers significant opportunity, more so as it develops and matures. Access to some of the key customers involved in this market, or involvement in the development of technologies or systems to support this, is limited. Any help to gain greater access or involvement would help us establish a foothold that we could build on."

Information about opportunities

"Any insight to upcoming opportunities is always welcome. Generally if we receive advance notice to projects etc we do receive he opportunity to introduce our capabilities."

"To help me into new sector and emerging projects within and outside the country which my company can get involved."

Other

"The oil and gas industry is still required and employs a lot of people but now lack of younger people coming into the industry and needs to be more of an awareness is that we still need hydrocarbons for a large part of our daily activities."

"Detailed market intelligence."

Further information can be found at www.scottish-enterprise.com or by contacting enquiries@scotent.co.uk



7. The detail

Appendix A – Sales in other sub-sectors

Table 2: A breakdown of non-oil and gas sales 2017/18

Source: AGCC

| Sub-sector | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------|------|------|------|------|------|
| | £bn | £bn | £bn | £bn | £bn |
| Other general engineering | 0.41 | 1.28 | 0.65 | 0.46 | 0.78 |
| Power generation | 0.47 | 0.04 | 0.12 | 0.30 | 0.42 |
| Defence | 0.23 | 0.29 | 0.30 | 0.00 | 0.06 |
| Renewables | 0.45 | 0.08 | 0.49 | 1.31 | 0.33 |
| Other civil engineering | 0.00 | 0.00 | 0.12 | 0.00 | 0.02 |
| Carbon capture and storage | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nuclear | 0.20 | 0.20 | 0.04 | 0.09 | 0.08 |
| Decommissioning | 0.00 | 0.06 | 0.02 | 0.05 | 0.02 |
| Offshore wind | 0.00 | 0.19 | 0.08 | 0.01 | 0.06 |
| Unconventional gas | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other | 0.14 | 0.03 | 0.04 | 0.01 | 0.05 |
| Total | 1.90 | 2.18 | 1.87 | 2.23 | 1.81 |

Figures may not sum exactly due to rounding

Appendix B - Country level analysis

The figures below reveal where the £10.9bn of international sales comes from around the globe.5

Table 3: Sales by country (top 20)

Source: AGCC



| Country | Overseas |
|--------------|----------|
| | sales |
| USA | £2.92bn |
| Norway | £0.71bn |
| Netherlands | £0.59bn |
| Canada | £0.44bn |
| UAE | £0.40bn |
| Australia | £0.38bn |
| Ghana | £0.31bn |
| China | £0.30bn |
| Nigeria | £0.26bn |
| Kazakhstan | £0.20bn |
| Brazil | £0.20bn |
| Germany | £0.19bn |
| India | £0.17bn |
| Azerbaijan | £0.17bn |
| Kuwait | £0.16bn |
| Saudi Arabia | £0.16bn |
| Malaysia | £0.14bn |
| Qatar | £0.13bn |
| France | £0.12bn |
| Singapore | £0.12bn |
| Other | £2.86bn |

Table 4: Country rankings 2018 vs 2017

Source: AGCC

| | USA | Norway | Netherlands | Canada | UAE | Australia | Ghana | China | Nigeria | Kazakhstan |
|--------------------------------------|------|--------|-------------|--------|-----|-----------|-------|-------|---------|------------|
| 2018 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| financial year ranking | Same | Same | Same | Same | Up | Up | Up | Up | Up | Up |
| 2017 financial year ranking | 1 | 2 | 3 | 4 | 6 | 7 | 11 | 13 | 10 | 23 |

The countries falling out of the 2017 top 20 list include Italy (now 32), Angola (now 26) and Denmark (now 23).

⁵ Please note that country and regional level sales data is by nature more approximate than the overall sales level analysis and so extra caution should be taken when interpreting and utilising this data.

Thailand

Countries that respondents reported international activity for are listed below.

Afghanistan Germany Oman Albania Ghana Pakistan

Algeria Greece Papua New Guinea

Angola Guinea-Bissau Peru

Philippines Argentina Guyana Australia Poland Hungary Austria Iceland Portugal India Qatar Azerbaijan Bahrain Indonesia Romania Bangladesh Iran Russia

BelgiumIraqSaudi ArabiaBoliviaIrelandSenegalBrazilIsraelSingapore

Brunei Italy Solomon Islands

Burkina Faso Ivory Coast Somaliland
Cambodia Jamaica South Korea

Cameroon Japan Spain
Canada Kazakhstan Sweden
Central African Republic Kenya Taiwan
Chad Kuwait Tanzania

Latvia

China Libya Trinidad and Tobago

Colombia Lithuania Tunisia
Congo, Democratic Republic of the Luxembourg Turkey
Congo, Republic of the Malaysia UAE
Croatia Maldives Uganda
Cyprus Malta Ukraine

Czech Republic Mexico United States of America

Denmark Morocco Dominican Republic Mozambique Egypt Myanmar (Burma) **Equatorial Guinea** Netherlands Finland New Zealand France Nicaragua Gabon Nigeria The Gambia Norway

Chile

Regional sales

The table below shows sales by geographical region in 2018 compared to the previous two years.

Table 5: Sales by region

Source: AGCC

| Rank | Region | Value £bn | Value £bn | Value £bn |
|---------------------|----------------------------|-----------|-----------|-----------|
| | | 2018 | 2017 | 2016 |
| 1 | North America | 3.41 | 3.64 | 2.89 |
| 2 Europe inc non-EU | | 2.26 | 2.62 | 1.60 |
| 3 | 3 Africa | | 0.72 | 1.35 |
| 4 | Middle East | 0.97 | 0.62 | 0.88 |
| 5 | Asia Pacific | 0.87 | 0.66 | 1.21 |
| 6 | 6 Australasia 7 Caspian | | 0.23 | 0.41 |
| 7 | | | 0.18 | 0.66 |
| 8 | South America | 0.35 | 0.20 | 0.34 |
| | Other not allocated | 1.21 | 0.64 | 1.06 |
| | Total | 10.9 | 9.7 | 10.4 |

Appendix C – Description of the sector

Figure 22: The oil and gas supply chain

Source: AGCC

Figure 2: The oil and gas supply chain

(Source: adapted from Oil & Gas UK)

Operators arrange the financing, licensing, and organisation of a project. They vary in size and in-house capability and thus in how they use the supply chain.

This segment provides support and services directly to both operators and contractors. This can range from the specific (e.g. offshore catering and specialist training) to the generic (e.g. recruitment and IT support).

Services and products provided to the upstream oil and gas industry can generally be segregated into 5 sectors. It should be noted that many multi-service companies straddle more than one category.

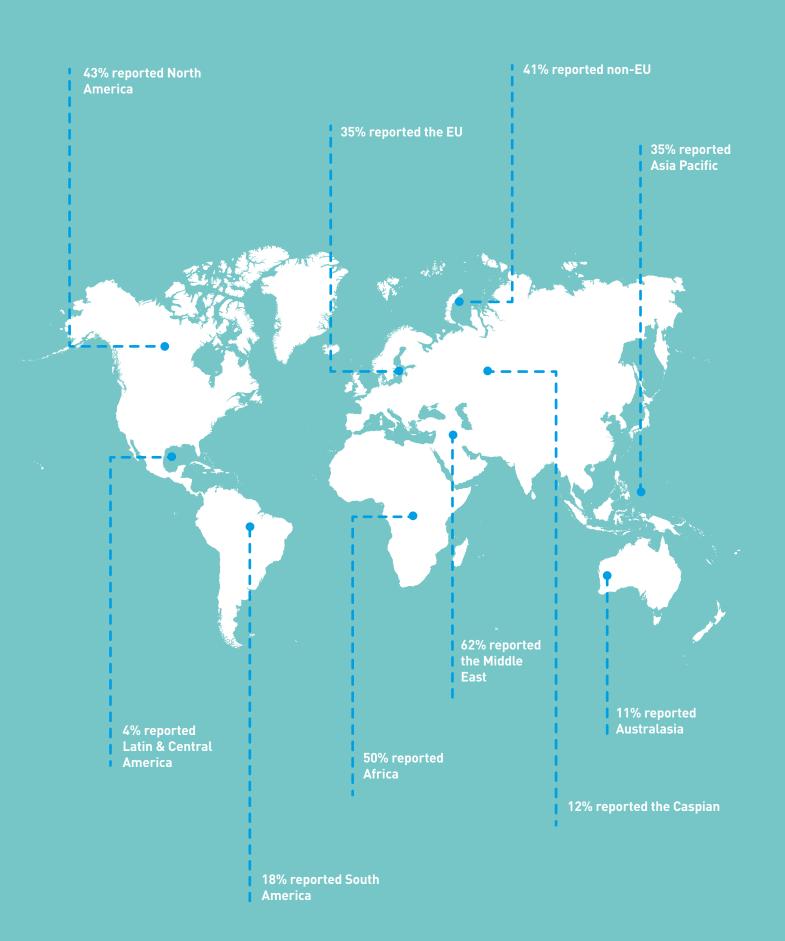
The supply all companies involved in a project including the end user (e.g. the operator). The nomenclature typically refers to the operator as tier 1, the main contractors as tier 2 and subcontractors as tier 3. Companies can straddle more than one tier.

Tier 2 Main contractors and consultancies

Tier 3 Products and services suppliers, components subcontractors and sub-suppliers

| Operators (Tier 1) All types of exploration, development and production companies: integrated majors, large and small independents, energy utility companies, non-operating companies, exploration companies | | | | Integral and Support Services | |
|--|--|--|---|--|--|
| Reservoirs | Drilling and Wells | Platforms and Topsides | Marine, Subsea and Pipelines | Catering facility management Sea/Air transport | |
| Reservoir engineering/ management consultancies Seismic data acquisition & processing contractors | Well services contractors Drilling contractors Well engineering consultancies Cement contractors | Engineering, operation, maintenance and decommissioning contractors Engineering consultancies Structure and topsides design and fabrication | Marine/subsea contractors Heavy lift contractors Pipelay contractors Floating production storage units | Warehouse/ logistics Communications Recruitment Training Health, safety and environment services Medical services Banking/finance | |
| Geoscience consultancies Data interpretation consultancies Seismic instrumentation Data storage IT/Hardware software | Drilling & well equipment design and manufacture Drilling tubulars Laboratory services | Machinery/ plant design and manufacture Engineering support contractors Specialist engineering services Inspection services Specialist steels and tubulars | Subsea manifold/ riser design and manufacture Marine/subsea equipment Subsea inspection services | Legal Insurance Accountancy Energy consultancies | |

Top regions named for growth in the immediate future

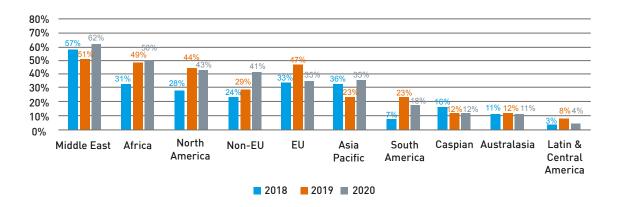


Appendix D – the detail on target growth countries

The immediate future - further analysis

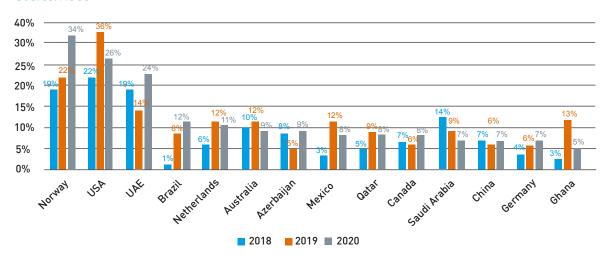
The figure below reveals the percentage of respondents reporting each region as a focus for growth in the immediate future. There has been a significant increase in the proportion of respondents naming the Middle East as a region for growth in the immediate future (up from 51% to 62%), it remains the top region for this time period. Other regions reporting notable increases in the proportion of respondents considering them as a growth region include non-EU and Asia Pacific.

Figure 23: Percentage of companies reporting region as a growth opportunity in the immediate future Source: AGCC



The top international country for future growth in the immediate future is Norway, followed by the USA and the UAE.

Figure 24: Percentage of companies reporting country as a growth opportunity in the immediate future Source: AGCC



The Middle East remains the top growth opportunity for the immediate future, and the percentage of respondents reporting the region as a growth opportunity in the immediate future and in the next five years has increased significantly.

Similarly, the percentage of respondents naming the UAE as a top growth country in the immediate future has also improved this year (up to 24% in 2020 from 14% in 2019).

Africa

This year sees an increase both in terms of the immediate future (up to 50% from 49%) and longer-term (up to 50% from 41%).

However, the percentage of respondents reporting Ghana as a top growth country has declined for both the immediate future (down from 13% to 5%) and in the next five years (down from 8% to 7%)

EU

The EU ranked in third place in terms of regions for immediate future growth in last year's report but has dropped to fifth place in the ranking this year. However, there has been an increase in the proportion of respondents identifying this as a growth opportunity in the next five years (up from 31% to 41%).

North America

Once again, the USA emerged as the most popular market for longer-term future growth, however it has slipped from first to second in the rankings for immediate growth (down from 36% to 26%).

North America remained the top growth opportunity for the next five years (up from 44% to 64%) and has moved up the rankings in immediate growth from fourth to third.

Non-EU

There has been an increase in the percentage of respondents reporting the non-EU region as a growth market in the immediate future (up from 29% to 41%).

Norway has ranked first in terms of the percentage of respondents reporting the country as a growth country in the immediate future (up from 22% to 34%) however has slipped from second to fourth in the ranks for growth in the next five years.

About Scottish Enterprise

Scottish Enterprise is Scotland's main economic development agency and aims to deliver a significant, lasting effect on the Scottish economy. Our role is to help identify and exploit the best opportunities for economic growth. We support ambitious Scottish companies to compete within the global marketplace and help build Scotland's globally competitive sectors. We also work with a range of partners in the public and private sectors to attract new investment to Scotland and to help create a world-class business environment.

There is an opportunity to increase Scotland's impact in overseas markets and by aligning our trade and investment activities with the work of our partners, we can maximise Scotland's international presence and visibility.

We achieve this through Scottish Development International (SDI), which is a partnership between the Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise and its work is guided by the Scottish Government's strategy for economic development in Scotland.

SDI International Activities and Support

SDI works to attract inward investment and knowledge to Scotland to help the economy grow. It also helps Scotlish based companies to trade overseas and promotes Scotland as a good place to live, work and do business.

SDI has a network of over 40 overseas offices in over 20 countries across the globe, staffed by a mixture of local and expatriate staff. Its offices are a key entry point and interface into local companies and economies within a country or region. SDI also collaborate with its partner organisation, the Department for International Trade, in regions where SDI does not currently have an office to ensure that in-country support is available in those areas.

For companies that engage with us in the energy sector, SDI undertakes a series of targeted oil and gas focused missions and exhibitions that are designed to match company capabilities within country opportunities.

If detailed information is required on the business environment in a particular region, then we can rely on the support of a network of GlobalScots who hold positions of influence within international companies. They can provide valuable insights into the operating landscape in their respective regions and industries.

Comment from the Chamber of Commerce



Russell Borthwick
Chief Executive
Aberdeen & Grampian
Chamber of Commerce

I hope you found the results of the latest survey of international activity interesting. I would like to thank all firms that took the time to respond. Without your input, we would not be able to provide this valuable resource for the industry. It is important to note that the data depicted in this report captures a snapshot in time prior to COVID-19 and all forecasting will reflect business views at this time.

It is positive to see growth in both domestic and international sales, a welcome change to the declines we had measured over the previous two years. However, given that the latest edition of this annual survey covers the 2018/19 period, we are yet to measure the impact of COVID-19 on both domestic and international sales. We know that the outbreak of the virus and the subsequent lockdown and mitigation measures adopted by governments are having a transformative effect on many sectors, and the oil and gas industry was one of the first to experience this in the early stages of the pandemic.

It is clear from these results that international activity and diversifying into other forms of energy are important to the Scottish supply chain and it is clear that firms are choosing to engage in diversification activity because they see it as a profitable route to growth rather than as a way to offset any reduction in oil and gas activity. This proactive approach, alongside the support of Scotland's respective governments via initiatives like the £62M Energy Transition Fund and the forthcoming sector deal, will be key to ensuring that the sector in Scotland plays a leading role in the industry's ambitions to decarbonise.

Over the course of this year we have seen drastic and unpredictable disruption to business globally. At the same time, firms in the energy sector have also been facing the challenges of a collapse in crude price. This industry has persevered through tumultuous change and uncertainty in the past and the remarkable resilience of the sector is once again being tested. There is no quick-fix solution to overcome the challenges the industry faces, however the Chamber will continue to work tirelessly to ensure the sector is supported on its path to a sustainable recovery.

Disclaimer

We hope you find the contents of this publication interesting and informative. The contents are intended solely to provide general information only and should not be relied upon.

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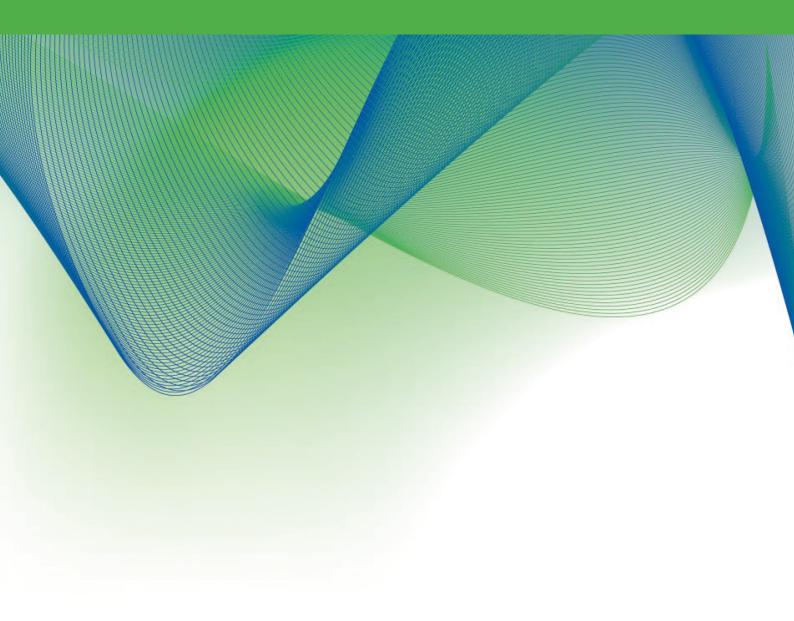
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