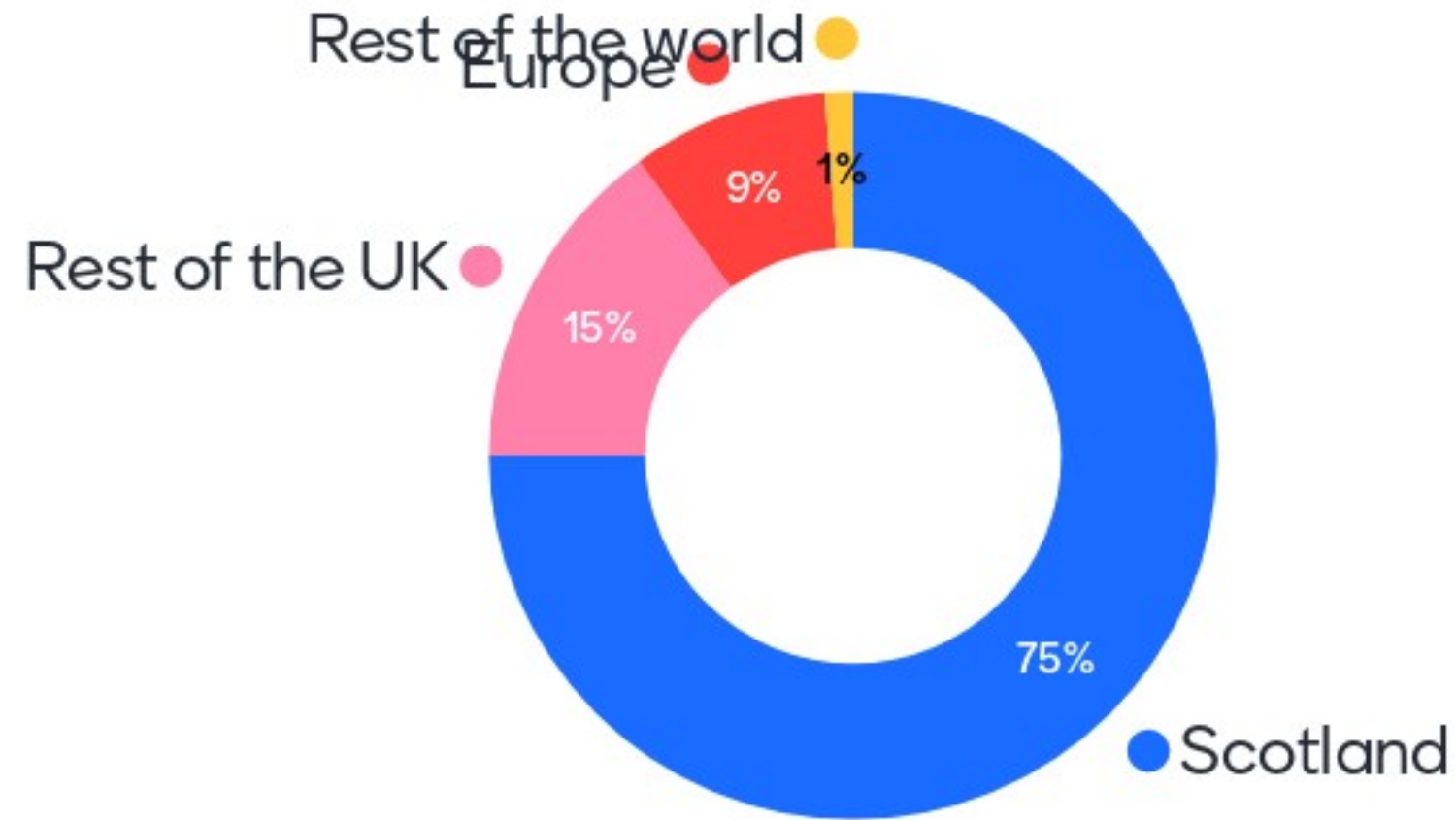


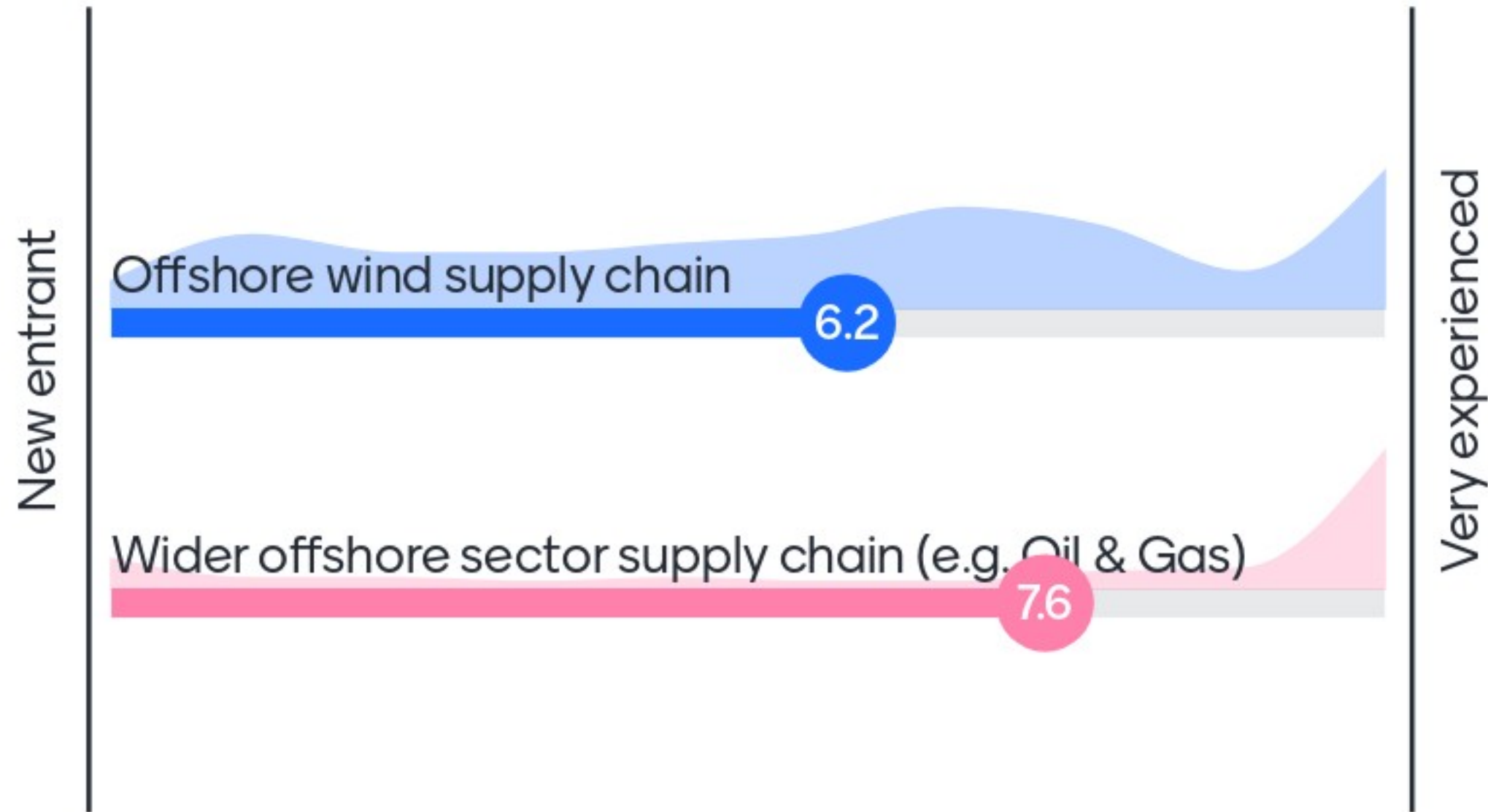
Getting to know you - Where are you joining us from today?



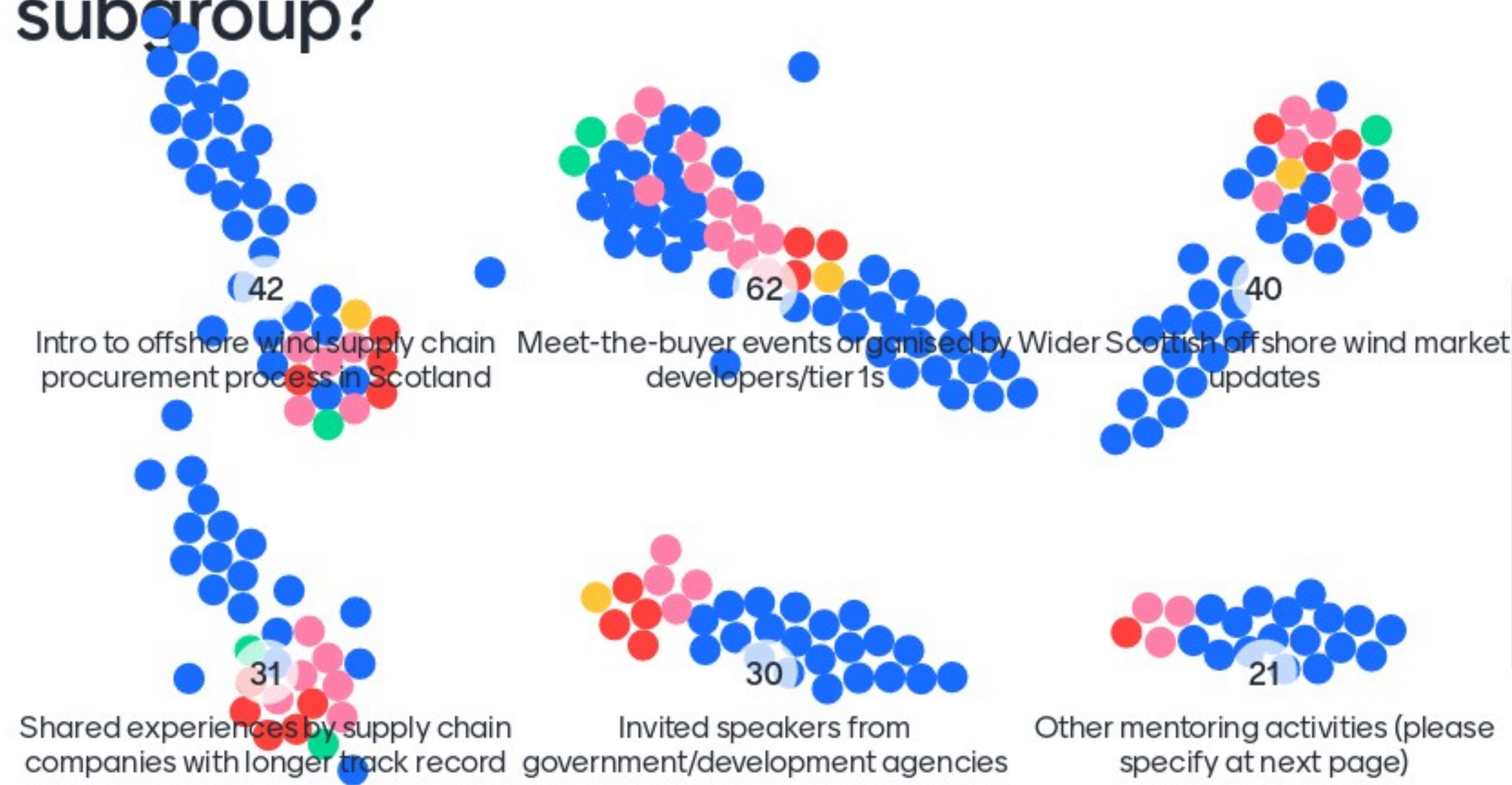
Company location - In which "region" is you company based?



Sector experience - How experienced is the company you represent in ...?



Capacity building for new entrants - What type of activities would you like to see as part of DeepWind FOW subgroup?



Company location - In which "region" is you company based?

- Scotland
- Rest of the UK
- Europe
- Rest of the world
- Unknown

Capacity building for new entrants - Any other ideas?

Put in touch with relevant universities offering up-skilling/re-skilling courses to migrate from O&G to offshore wind industry

Mass production & robotics

Advanced Manufacturing and Industry 4.0

Monthly Summary / status of the Scotland offshore wind projects

understand main supply chain services or products?

collaboration to enhance local content

Where can companies work together to bring down LCOE of particular aspects

Help promote the services of group members - stop it being the same old same old suppliers. This blocks new entrants, and often capability goes abroad.

Ensure that correct service categories are represented in Supply Chain Registration portals/websites

Capacity building for new entrants - Any other ideas?

Help us to access funding to develop technology

Important to understand if FOW requirements are same as offshore O&G or more relaxed.

We would be interested in understanding opportunities for collaboration. there are many projects that are larger than one company but together create an opportunity to work together to supply

Understanding the range of the differences between fixed and floating offshore wind developments.

understand how a more collaborative approach can be developed to drive cost reductions

Transition from O&G. Today oil workers said it is difficult to transition because of salary differences, loss of seniority and expensive training. How can FW subgroup assist this transition?

Can we look to use local companies ?

PEER review of product viability to fast track TRL process assessment

Regular updates on Scottish floating wind projects.

Capacity building for new entrants - Any other ideas?

Supply chain challenges facing developers/Tier 1

Breakdown of all components needed for floating wind and mapping of Scottish companies capabilities

Guidance on CfD landscape / changes

Ask the tier 1s for specific challenges, aggregate and then provide these as funded open competitions for new entrants to tackle.

Advancing Floating technology usage. Floating specific info and data and assistance

Supply chain events to try and establish supply chain partnerships so that Scottish companies can be more competitive in the current offshore wind sector in Scotland

Provide access to a shared contact database of industry focal points for each member

Single supply chain procurement process

Main technology challenges, likely critical success factors from a developer perspective, scale and sizing as 1st entry point i.e. what MW sizing.

Capacity building for new entrants - Any other ideas?

1-2-1 opportunities with operators

Ensuring local content "guidelines" acted upon by Operators

Site screening and survey design.

Review companies' current capabilities and identify opportunities

Introductions to not only Tier1 but also EPC contractors.

Readily adaptable expertise from O&G re. floating installations, dynamic umbilical issues etc.

Forum to illustrate the products or solutions on graphical illustration of FOWT's

Guidance on how to get in to offshore wind after being in oil and gas for so long. The report today on transferring skills is so accurate! Same skills, but jus not being accepted

Back to basics workshop to help new entrants understand the industry, the major players, the challenges, how to engage etc. It's easy to make assumptions when you know the industry and miss vital information needed by new entrants

Capacity building for new entrants - Any other ideas?

Identify areas of concern from Array Developers, logistics, ports and harbours. Areas of concern from Floater builders, monitoring, tensioning, vessel availability

Integration with the Floating Offshore Wind Centre of Excellence

1. To highlight partnering chances with commercial associates
2. To provide a forum for new entrants to highlight/demonstrate/disseminate novel approaches/methods/technologies etc.

Help supply chain with a strategy for all new developments rather than having to treat every project, even from same companies, as unique and so repeat each approach every time

Website with all live supply chain opportunities available

How do we differentiate ourselves as floating capable companies

Collaboration opportunities..

O&G transition.. Leveraging experience to support FOW

Encourage renewable industry to accept experience and capabilities from Oil & Gas, rather than dismiss.

Capacity building for new entrants - Any other ideas?

Cable innovations

Floating Wind Project projections. Contract award dates as in oil and gas with the EIC database. Buoyancy and Cable Protection forecasts

Technology challenge workshops, visibility of up coming contracting opportunities down to SME or technology needs rather than Tier 1 and EPC level

Define the requirements from an engineering and technical perspective to capture the real experience of offshore oil & gas and communicate experience and knowledge

Where is it best for O&G companies to go into floating wind sector

We need to keep an updated directory of talent / capabilities that can be used to showcase what can be done locally

Case Study of how new or newish entrant identifies opportunities then a step by step walk through of how that journey is navigated to tender opportunity - do's / don'ts , what a company needs to prequalify.

Post-installation O&M interventions / innovations.

Work out the best energy markets to be served associated connectivity and strategic development locations. Consider the maritime support and port development opportunities. Create subregional clusters which allow SMEs to compete

Capacity building for new entrants - Any other ideas?

Helping market Deepwind supply capabilities

strengthen ties between cross-border alliances

Built in subsea monitoring to reduce intervention costs.

An understanding of the local content requirement and how this can be achieved

Identification of gaps in the Scottish supply chain

How to judge what is and what is not relevant RFI's

Make linking to academic research as direct as possible.
Use EPSRC Supergen Hub

Applying readily adaptable skills from O&G

Centralised portal for floating wind supply chain, through which developers can access supply chain.

Capacity building for new entrants - Any other ideas?

Meet with Developers / Tier 1's early on in project

Approach to consenting

ports and harbours

Cost reduction

Confidence in cost forcecasting and management of technical risk

Balanced risk for suppliers in FOW rather than excessive risk.

Joining projects together - so each one is not a unique piece of work to bid for. Helping the developers have a strategy across different projects

Peer Review / High Level Comparison of different floating structures

Safety. What do the developers need, what systems and equipments are transferable from O&G?

Capacity building for new entrants - Any other ideas?

Use of Scottish ports for floating foundation fabrication - steel and concrete

Identify to subsea suppliers what equipment and services are required subsea - and what will be above water.

Installation efficiency

Reduction in time currently required to get Consents

Getting access to developers to challenge existing methods and consider alternatives

Integration with oil and gas companies for near term electrification projects

Help companies that have supplied to FOW to gain visibility for other projects globally

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Insurance - What role does it play and how can supply chain help reduce risk/increase cover

Cables, mooring and anchors

New contracts, innovation, news.

Fabrication (in Scotland)

Building an indigenous supply chain - design *and* build.

quality concerns and issues

Lessons learned from global FOW projects

Holistic approach toward floating wind development - Political, Economic, Social, Technological, Environmental approach

How to co-exist with fishing and other industries

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Technology bottlenecks and needs

O&M strategy and port infrastructure

Cost reduction

with all the activity in the market - is there a skills shortage coming (locally)

Ensuring local content is prioritised and supported

What is required from suppliers

Interaction with Fishing Industry

Early awareness of plans and strategies to allow early access to developers.

Floating wind substations

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Reducing development time

Port infrastructure.

Gaining access to the correct people within supply chain for the correct services. Multi skilled suppliers knowing how to offer a full scope to the T1's perhaps through 1-2-1's.

Investment opportunities in infrastructure. Identify winners and help develop do the industry can move to be inclusive with more radial benefits

How to fabricate an Scottish floating foundation

Heavy maintenance for floating offshore structures.

Consenting challenges for floating wind

likely technology rationalisation of electrical system

How do we avoid being an importing-market, where all the high value engineering and manufacturing is overseas?

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

What companies need to do to make the move from oil and gas to offshore wind

HSE practices Vs the oil and gas sector

Harness existing expertise / technology to address the greater challenges of floating developments.

Contracting conditions and liabilities

Local content MUST be improved - is there capability in one location to build a centre of excellence that companies can make use of (tech and service)

How we accelerate deployment and reduce costs on a similar scale to fixed bottom wind to solidify our global leadership position in this technology

Where and how to feed in the national grid

Gain an understanding long term Operation and Maintenance strategies

How is the contracting format going to change when Oil & Gas owners introduce Tier 1 type contractors.

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

How to bring forward FOW in parallel with fixed bottom in order to deliver 40GW by 2030

Alternative floating wind support structures, and opportunities for multi-purpose platforms (e.g. aquaculture + offshore wind)

Improving joint engagement with stakeholders

Importance of LCoE and impact on supply chain.

A combined group approach to Port infrastructure

Energy markets and associated connectivity
Maritime support in harsh environments
Strategic mega port development (Scapa Flow options - 4km-10km of deepwater quayside)
Cluster building in regional locations to help SMEs work at higher tier levels

Nature inclusive design to maximise marine benefit from new developments

Talks around lowering CO2 emissions over the life of the project

Floating specific O&M opportunities/ challenges

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Grid constraints and TNUoS charge disadvantages for Scottish projects

serial production/fabrication capacity for floating substructures

collaborative working and tender responses - how can this be developed to enhance Scottish company position

Can floating wind become more economic across the full life cycle, compared to fixed wind?

Use local experience and Scottish engineering experience to influence design processes at an early stage, rather than engage at a later stage

foundation structure design for ease of fabrication

How is maintenance going to take place. On location or tow away

CfD process needs to be improved otherwise local content will never be achieved - can lobbying be stepped up as a group

Environmental impact understanding

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Connecting floating offshore wind farms to the Grid

Co-ordinated transmission between different OW projects and other technologies.

Breakdown and nature plus financial value estimate of FOW programme components that are available to members to pursue

Differences between P&M of fixed wind turbine and floating wind turbines (currently largely ignored!)

O&M models - in situ vs return to port. Can small, local ports be used or are larger ports required for size of vessels now used. Local content of O&M for FOW

Supporting SMEs to complete TRL trials and provide reference sites

Wish list from developers for future port infrastructure

Hydrogen integration, either for energy storage or hydrogen economy

Digitilisation... Can it reduce costs and risks and if so, how can we make it happen?

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

FOW and green Hydrogen production

Insurance and risk management for supply chain - what are keys risks and how best to manage

sharing foundation design ideas and establishing fabrication norms to assist design

Local content involvement must be improved throughout the design, construction and build of the floating offshore wind farms

innovations CFD, Innovation demo sites

Operational and maintenance issues for floating offshore wind

Sharing information at design stage making sure it's compatible with the services required

Skills transfer

Link to Floating hydrogen

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

Building up ports/harbour capabilities to meet higher demand.

Integration of FOW and green hydrogen technology

Typical Maintenance and repair requirements

1. use of robots/autonomous systems (aerial; submerged) within FOW asset integrity programmes
2. mechanisms to engage with developers/Tier 1 contractors to bring innovations forwards

confidence in cost forecasting and management of technical risk

Understand relative gains from investing during development V's life of field operating costs.

Hydrogen and bunkering facilities

Collaborating to create a sustainable pipeline of work for the supply chain, rather than the peaks and troughs seen in fixed bottom wind

Safety enhancements and process improvement for those working at site

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

integrating floating wind with green hydrogen generation and distribution

How to drive down costs while significantly increasing local content

QHSE requirements

Recruitment

Balance of floater design vs ease of fabrication. Where are the floaters stored during longer fabrication times?

Skills transfer needs to be addressed -we have a plethora of available talent in the workforce but retraining and transfer from other sectors seems to be difficult/costly

CfD and consent processes should take account of the carbon footprint - should encourage local fabrication

Connectivity of innovators - how can this be improved especially where they offer complementary elements

Can there be a 'master' port

Masterclass series - Which challenges/topics would you like DeepWind FOW subgroup to focus on?

To work on the limited Ports with capabilities to build shoreside prior to tow the installation to field?