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Smarter Subsea:

Addressing the Challenges of Workforce Sustainability within Scotland's Energy Transition

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Workforce sustainability plays a critical role in achieving a just and effective transition - toward cleaner energy systems whilst maintaining environmental sustainability. As Scotland's economy navigates the decline in its 50-year old fossil fuel industry, and with the rise of renewable energy, the workforce faces both significant challenges as well as exciting opportunities.

Successfully transitioning Scotland's workforces to support these sectors sustainably, as well as the other key marine industries of fishing, aquaculture and defence, requires multi-scalar sustainable governance. This involves ensuring all workers' skills, job securities, and the protection of communities - historically reliant on an individual industry - are inclusively managed both nationally and locally in an equitable manner to avoid conflicts and to grow the economy for the benefit of all workforces.

In the offshore energies sector, sustainability transitions have long been hindered by fragmented and conflicting national policies. Top-down approaches, from both the UK government and Scottish government, have often created tensions across all marine sectors, leading to localised and specific industry led initiatives to spearhead change more effectively.

The energy transition also intersects with the broader environmental sustainability, creating opportunities for workforce sustainability to align with ecological priorities. For instance, the growth of sectors like the decommissioning of redundant marine infrastructure not

only supports workforce transitions but also emphasises marine health. This demonstrates the kind of systems thinking that enables co-benefits across social, economic, and ecological dimensions, and which fosters a circular economy where the workforce and ecological preservation are mutually reinforcing.

A key way workers can support industry transitions is by pivoting their skills to all marine sectors. Most, if not all, skills from carbon-intensive industries—such as innovation, engineering, project management, supply chain integration and marine operations—are highly relevant and in demand in renewable energy. Collaboration between all marine industries, industry representative bodies, and national institutions (enterprise, investment and education) are all essential in ensuring all

workers and their proven competencies are accessible to all industries.

Economic safety nets and supportive policy frameworks are also critical to facilitating workforce accessibility to all of the industries of the marine sector. Government, both UK and Scotland, can introduce incentives, such as tax breaks or subsidies, for companies that support all marine industries in an integrated and complementary approach. Also national, devolved, and regional support systems, can be particularly impactful in areas heavily reliant on a single industry. Thus, long-term policy certainty, combined with participatory approaches to decision-making, ease transitions signalling a commitment to workforce sustainability and building trust within communities.

Smarter Subsea and SFF Services exemplify this integrated, innovative and complementary approach towards workforce sustainability. Smarter Subsea, based in Westhill Aberdeenshire, is a group of companies, each focused on different areas of the marine sector. Whilst its prime focus is supporting offshore wind expansion, the company also engages in oil & gas decommissioning, as well as defence clearance and security. It specialises in providing multi-functional, remotely operated underwater vehicles that deploy, recover and reposition heavy subsea and seabed infrastructure, ranging from one to over 1000 tonnes, across all marine sectors, with an emphasis on offshore wind.

Complementing Smarter Subsea, SFF Services leverages Scotland's fleet of over 400 fishing vessels to support decommissioning, construction, and operations across marine sectors. A key innovation from Smarter Subsea is the ability to deploy its underwater vehicles from smaller boats, avoiding the reliance on heavy-lift crane vessels and barges, which are both in high-demand and have limited availability.

To achieve this, Smarter Subsea collaborates with SFF Services as part of a 2026 market entry plan, utilising available capacity within Scotland's pelagic fleet to deploy its underwater vehicles in support of all offshore wind sector activities, including



Pictured: Rand Al-Jafar, University of Aberdeen, with Steven Alexander, SFF Services, and Fraser Dunsmore Pritchard, Smarter Subsea

pathway clearance, construction, operations, maintenance and decommissioning.

This collaboration between Smarter Subsea and SFF Services creates year-round job opportunities, fosters the pivoting of skills to all marine industries, enhances economic prospects for Scotland's fishing communities, and expands their involvement beyond the fishing sector to the wider marine sector.

What makes this collaboration particularly valuable is its ability to align different capabilities, priorities and resources toward a shared goal. By combining technological innovation with operational experience, Smarter Subsea and SFF Services demonstrate how collaboration across sectors can overcome capacity gaps, support regional resilience, and accelerate sustainability transitions in practice.

By fostering collaboration and pivoting workforce skills across marine sectors, this approach not only addresses the shortage of marine vessels for the energy transition but also enhances workforce and environmental sustainability by promoting a cleaner seabed. This demonstrates how integrated solutions generate wide-reaching social and environmental benefits, which are crucial for long-term transition success.

Smarter Subsea and SFF Services are leaders in sustainability transitions across Scotland's energy and marine sectors, showcasing the transformative power of innovative thinking and a shared commitment to positive change for the benefit of Scotland and all its communities.

“Workforce collaboration fosters the pivoting of skills to all marine industries, and enhances economic prospects for Scotland's wider marine sector”



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