

Meeting Future Skills Demand Action Plan

Introduction and context setting

Forecast workforce demand is likely to outstrip potential supply over the next decade. At present, the offshore energy sector has no integrated or single 'proposition' for ensuring that the necessary future skills are available. Challenges remain in the recruitment and retention of skilled, experienced workers in the face of strong competition from other offshore regions around the world and from other industrial sectors.

As subsets of the energy sector diversify and evolve, so too must the clarity around education frameworks and qualification pathways that support the wider industry. As emerging technologies bring new roles and qualifications into the market, and the skills landscape becomes busier, progression pathways and career progression opportunities must be made clearer. Understanding the differences between, and the complexities arising from, regional qualification requirements and devolved funding streams will simplify and better enable movement of labour throughout the energy sector to the benefit of companies operating across all UK regions.

This Action Plan aims to ensure that future skills demand is effectively understood and measured, and that mechanisms are in place to accurately and clearly direct both new entrants to the industry, and those wishing to cross sector boundaries or upskill or multi-skill into different roles. It forms part of the wider North Sea Transition Deal (NSTD) Integrated People & Skills Strategy which highlights a series of strategic priorities that will help to create a diverse, integrated offshore energy workforce.

Current situation

At present, there is a fragmented approach to the delivery of apprenticeships, with variations across the four nations of the UK in terms of procedures for accessing the Apprentice Levy funding and other support. The national STEM (science, technology, engineering and mathematics) training landscape is crowded with over 3,000 STEM delivery bodies and little effective coordination, leading to duplication of effort. However, apprenticeships alone cannot hope to meet the substantial demand for future skills requirements. Developing various alternative pathways and entry routes will be essential in responding rapidly, flexibly and at scale to the energy sector's evolving needs.

Meeting the future demand for skills will require an unprecedented level of collaboration and coordination across the offshore energy sectors. With the potential creation of 108,000 new jobs by 2030, and more than 100,000 additional new jobs between 2030 and 2040, there is a risk that future skills requirements will outstrip available supply.

Lessons from a mature industry, like oil and gas, and developments in technician apprenticeship frameworks, tiered methods of competence assessment and progression pathways, can be utilised and adapted to fit current and future need. While sub-sectors like hydrogen and CCUS (carbon capture, usage and storage) are at an earlier stage in their evolution, action must be taken now to attract and appropriately train an 'energy' workforce so that the scale of opportunity is both communicated and realised. A vehicle to assess, recognise, and credit existing qualifications across the breadth of the workforce and provide feedback on skills gaps will help to unlock this opportunity.

Stakeholders in Meeting Future Skills Demand Action Plan

There are several key stakeholders whose input will be crucial in order to ensure that all objectives of the Meeting Future Skills Demand Action Plan are realised. Consultation will be sought with sector skills bodies, trade unions, education hubs and government entities. Once outputs from this Action Plan are in a tangible and cohesive format, engagement will expand to include operators, supply chain companies, trade associations and developers to ensure that outcomes are suitably weighted and, ultimately, of value to the wider sector.

Action Plan Activities

Strategic Priority 5 from the Integrated People & Skills Strategy

Develop an offshore energy vocational education framework covering apprenticeships, T-Levels and national and Scottish vocational qualifications

A single, condensed, and consolidated view of the current, UK-wide vocational qualification landscape will be provided as part of this objective and will be mapped against expected future demand, utilising the data presented in the NSTD Integrated People & Skills Strategy. This will include various qualification structures, including multi-level National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs). This framework will demonstrate how particular pathways can lead to specific jobs and careers in the energy industry, make accurate assumptions on scenarios, and detail how existing qualifications and apprenticeship programmes can be enhanced through the addition of technology-focused units.

There will be an emphasis on the development of initiatives like the versatile All Energy Apprenticeship programme, as well as on how current education policy can support and shape options for those aged 13–18 in the UK. Industry has made clear the need for qualifications that are clearly mapped, and which articulate job role breadth. The stand-alone, or bridging, qualification format is a quick-to-deploy solution while the wider question of technical apprenticeship standards and potential integration with energy transition content merits further discussion. The All Energy Apprenticeship qualifications and other initiatives have a wider role to play too; content could be extracted for the purpose of wider integration into school curriculums, T-Levels and introductory eLearning offerings, as well as into adult retraining or upskilling.

Activity Plan

ACTIVITY	DATE
Map and consolidate the current vocational education landscape and available qualifications	Q1, 2023
Agree relationships with the relevant UK bodies and stakeholders to ensure cross industry Draft an overarching, cross-sector qualifications framework covering oil and gas, wind, hydrogen, and CCUS (more areas may follow as part of a 'phase 2')	Q2, 2023
Consider options to embed the framework into an appropriate space in the public domain	Q3, 2023
Integrate the framework into relevant industry skills bodies' areas of activity, including the promotion of new pathways	Q4, 2023
Define a maintenance-and-review cycle	Q4, 2023

Strategic Priority 6 from the Integrated People & Skills Strategy

Map and support a more integrated approach to graduate and post-graduate attraction, including internships and work experience placements

There are numerous opportunities for qualified and skilled personnel in the wider energy sector. However, these opportunities need to be appropriately communicated and clear industry entry-points must be identified. With that in mind, a gap analysis will be undertaken, and strategies designed, to attract undergraduates and identify the additional training required to meet demand, as well as encourage industry investment into the wider talent pool. In the first instance, research will be undertaken to fully understand and articulate the apprenticeship landscape across the UK, comprising foundation, graduate, degree and modern apprenticeship pathways. Sector engagement will also increase to ensure that appropriate national strategies are utilised, and funding can be successfully accessed. Cross-representation on UK-wide working and steering groups will be critical, for instance with the Scottish Funding Council and the Climate Emergency Skills Action Plan Education Steering Group.

In the medium term, a programme of activity will be initiated with employers to better attract and signpost new entrants to the sector. This will then link into a centralised solution specifically designed to effectively display and track current opportunities and positions.

This work will have tie-in with other strategic priorities referenced in the Integrated People & Skills Strategy, notably around My Energy Future, as well as the Skills Passport – a repository for certification data that the workforce will also be able to use for worksite access requirements, and to view potential career pathways. It will focus on graduates and post-graduates in largely scientific and environmental roles and offer solutions as to how existing frameworks can be enhanced to add more value to the integrated energy career proposition.

Activity Plan

ACTIVITY	DATE
Review graduate progression opportunities in the UK, to clarify common industry job roles, entry points, qualifications required, and transferability options	Q1, 2023
Define a communication and dissemination strategy	Q2, 2023
Develop a visual web-based solution to signpost to cross-sector employment opportunities	Q3, 2023
Test and roll out the web-based solution	Q3, 2023
Maintain and update the web-based solution	Start of each academic year

Strategic Priority 7 from the Integrated People & Skills Strategy

Further develop and promote the My Energy Future STEM programme, including the creation of an employee value proposition for the offshore energy industry

The visibility and accessibility of the wider STEM agenda is a critical part of the journey towards achieving the net-zero workforce of the future. This means refining the My Energy Future website so that it continues to provide interactive and engaging content suitable for embedding in schools, including through local networks and hubs. An active user base will be maintained with passionate ‘energy influencers’ contributing to the discussion. Additionally, the facilitation of ‘My Energy Future Live’ events will continue and the presence in schools, the community, and science centres will increase. The goal is to ensure that STEM curriculum content is well embedded in schools across Scotland and England to inspire the next generation of energy industry workers. The integration of My Energy Future into existing, UK-wide STEM programmes and regional initiatives will strengthen engagement in energy cluster areas.

In the first instance, research will be required to understand all current initiatives related to STEM and potential alignment with stakeholder programmes and funding. This will then feed into the design of the new My Energy Future agenda and allow target audiences to be identified through a period of stakeholder consultation, which will also look at integration opportunities to strengthen existing programmes. STEM-related products and services will be crafted as necessary to fill outstanding gaps, and key national and international partnerships will be enhanced and maintained.

The long-term objective of this work is to successfully attract future generations and to promote the integrated energy sector as a long-term career proposition. With that will come a second phase of My Energy Future that will enhance the existing website by incorporating a variety of STEM initiatives developed by partners across the energy industry.

Activity Plan

ACTIVITY	DATE
Collate and analyse existing regional STEM initiatives and hubs	Q1, 2023
Form a ‘STEM Champions’ group to discuss the wider value proposition and how My Energy Future can provide influence	Q1, 2023
Create a live calendar of planned and recurring STEM events	Q2, 2023
Refresh My Energy Future website and education aids, including the prospectus	Q3, 2023
Regularly publish engaging new content including ‘energy influencers’ case studies	Q4, 2023
Explore current industry offering(s) and develop an energy-wide and inclusive employee value proposition	Q4, 2023

Strategic Priority 8 from the Integrated People & Skills Strategy

Map and develop transition pathways to support the attraction and mobility of people from other engineering and technology sectors, including the transition of ex-military personnel

The underpinning principles of the NSTD are predicated on the need for a mobile and fluid workforce. A clear way to enable that is through the creation of transition pathways and standards. These would be supported by promotional material including career pathway graphics that demonstrate industry job roles, entry points, qualifications required, and transferability options. As new technologies evolve to meet energy demand, it will also be necessary to attract individuals from other engineering and technology sectors to support the expected increase in jobs.

The findings from comprehensive mapping work will form the basis of cross-sector pathways and indicate bolt-on training, competence assessment or up/cross skilling requirements. There is also a need to consider appropriate policy and integration with the Armed Forces Covenant and to ensure that transition opportunities are clearly communicated.

This strategic objective will present a consolidated and clear view of minimum sub-sector training and qualification requirements, aligned to a particular scope that includes oil and gas, fixed and floating offshore wind, hydrogen and CCUS as part of 'phase 1'. The inter-relations between training requirements in high-hazard environments must be a priority. An aspirational 'phase 2' will follow when a defined scope is clear, but could target nuclear, solar and wave and tidal.

Activity Plan

ACTIVITY	DATE
Consolidate the current transition pathway landscape and draft a report that highlights potential inter-linkage with the Skills Passport and tie-in with relevant government policy	Q1, 2023
Socialise the report with industry skills bodies, government, education and training providers, and other appropriate organisations	Q2, 2023
Define a communication and dissemination strategy	Q3, 2023
Commonly agree a review process, with the appropriate frequency, to ensure future currency and applicability	Q4, 2023
Visually present inter-sector career pathways in conjunction with 'Aligning Offshore Energy Standards' action plan	Q4, 2023

Strategic Priority 9 from the Integrated People & Skills Strategy

Support the continued development and implementation of the Centre of Doctoral Training in Geoscience, creating the next generation of academic expertise in the energy transition

Discussion is ongoing between OEUK and the Centre for Doctoral Training (CDT) to secure future funding and to progress this initiative's intention and purpose.

The industry input to support the successful development and delivery of the Action

As the Integrated People & Skills Strategy sets out, this is a complex cross-sector strategy which needs the industry to work in different ways to achieve strategic priorities. The areas below set out the key factors that will enable the delivery of the Action Plan:

- **Future skills demand effectively understood and measured – an offshore vocational education framework will accurately and clearly direct new entrants to the industry, and those upskilling or reskilling into cross-energy industries.**

- An integrated approach to graduate and post-graduate attraction – clear industry entry points identified to attract undergraduates and identify the additional training required to meet demand, as well as encouraging industry investment into the wider talent pool.
 - Interactive and engaging content suitable for embedding in schools to promote the energy sector as a long-term career proposition – increased visibility of, and access to, the wider STEM agenda is vital to create the net-zero workforce of the future.
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Outcomes

Performance: new alternative pathways and entry routes will simplify and better enable movement throughout the energy sector to retain high-quality jobs.

Collaboration: sectors work collaboratively when developing pathways and entry routes to meet workforce demand.

Finance: regional qualification requirements and devolved funding streams that simplify and enable movement throughout the energy sector to benefit companies operating across all UK regions.

Visibility: the future skills demand is effectively understood and measured to create a mobile and fluid workforce.

Accessibility: STEM curriculum content is embedded in schools across Scotland and England to inspire and attract the next generation of energy industry workers.

Attract: the integrated energy sector is positioned as a long-term career proposition which successfully attracts future generations.
