

Inquiry Response

UK workforce needed to deliver clean, secure energy

Fuels Industry UK represents the UK downstream fuels industry, which remains a key player in the energy sector supplying over a third of the UK's final energy consumption. We welcome the opportunity to respond to share evidence with the Committee on the shortages we see in the UK workforce:

1. **Does the Government have an appropriate understanding of the skill needs to deliver the Clean Energy Mission by 2030 as well as decarbonise homes and businesses?**

The UK refining and fuels supply industry believes that the Government has a growing understanding of the skill needs required to deliver the Clean Energy Mission and decarbonise homes and businesses. We have shared our own modelling with Home Office on the specific needs for temporary labour for essential maintenance within our refining sector. For large manufacturing complexes like refineries, maintenance is ongoing which is done by permanent staff, however, it is also necessary to undertake large 'turnarounds' that require sites to be temporarily shutdown – which greatly affects profitability so is done on a planned cycle once every 3–5 years and therefore needs large numbers of temporary, though skilled labour. Each refinery may use upwards of 2000 people per maintenance and upgrade project, which is against a business-as-usual workforce per refinery of 400–1500 workers).

Among this group of skilled labourers, the UK manufacturing sector has identified specific skilled roles that are in particular shortage including but not limited to: pipefitters, welders, Mechanical Fitters, Riggers, Steel erectors, Catalyst workers, Dredging workers. That a number of these roles are acknowledged by the Migration Advisory Council's Shortage Occupation List is an indicator that the issues are understood, although we do not believe the long term shortage numbers are as well understood.

The industry encourages the Government to engage in regular consultations with sector stakeholders to ensure a comprehensive understanding of the evolving skill requirements. This will be able to better quantify the existing needs of employers who are seeing shortages in the short term, but also to better understand the long-term needs of our sector (and others), where we expect both an increase in skills needs for build of new technologies (within our sector these include: [carbon capture projects](#), [hydrogen projects](#) and those in lower carbon fuels) as well as the need to maintain workforce skills for continuation of business as usual activities, in the face of an ageing trade workforce ([The UK Trade Skills Index 2024](#)) and one that is failing to replace those heading into retirement.

2. To what extent can the Clean Energy Mission and the retrofitting of homes and businesses be carried out by the existing workforce, and to what extent will it require new entrants to the workforce?

The existing workforce can contribute significantly to the Clean Energy Mission and retrofitting businesses (we do not have a view on homes), but new entrants will be essential to meet the increasing demand for skilled labour – the UK has an ageing workforce – particularly for trades which are vital for clean energies and industrial projects.

For the existing workforce, there is relatively little upskilling that will be needed in our businesses as many of the skills needed for future ‘green’ technologies are those which are already delivered by our workforce e.g. carbon capture uses amine treatment which is already done (for sulphur capture) on a refinery, and the refineries already account for around half of the UK’s hydrogen production and consumption, with low carbon hydrogen [identified by DESNZ](#) as a critical technology for net zero. There are clear synergies between current businesses and future development opportunities that can be utilised. These needs exploring further to help accelerate the delivery of clean energy whilst retaining readily available talent. Although upskilling is imperative, the skills currently available in the industry also need to be scaled up. This includes engineers right through to on-the-tool’s workforce.

The fuels industry supports initiatives that promote apprenticeships, vocational training, and upskilling programs to prepare the existing workforce and attract new talent, however, as noted in our response to Q1, there are still shortages in the needed temporary workforce that delivers maintenance and upgrade (retrofit) projects to our critical national infrastructure for fuels – as such new entrants to the workforce must be prioritised. To encourage future generations into the transition space, STEM activities are essential.

3. How might the Government ensure that the job market in clean energy roles is sustainable enough to incentivise private sector investment in training for 2030 and beyond?

To incentivise private sector investment in training, the Government should create a stable policy environment that encourages long-term planning and investment. This could include providing financial incentives, such as tax credits or grants, for companies investing in training and workforce development. Additionally, the Government should work on building a robust and diverse clean energy supply chain, which would create a sustainable job market and attract further investment.

[Fuels Industry UK and other manufacturing trade associations wrote to Government in 2024](#), outlining 5 critical actions it might take to address skills

shortages and incentivise that private sector investment, however, we are yet to receive a response from the Westminster Government.

4. How can the new Office for Clean Energy jobs contribute to workforce planning in the energy sector?

The new Office for Clean Energy jobs can contribute to workforce planning by conducting comprehensive labour market analyses, identifying skill gaps, and coordinating efforts between industry, education providers, and government agencies. They should use the information that already exists on these topics as there is plenty (e.g. for manufacturing and energy some notable information sources exist from the Engineering and Construction Industry Association, National Grid and others.)

The office should also promote best practices in workforce development and facilitate partnerships between employers, training providers, and job seekers.

5. What more can the Department for Energy Security and Net Zero do to ensure the workforce is in place to deliver the Clean Energy Mission and accelerate the retrofitting of homes and businesses?

The Department for Energy Security and Net Zero can further support workforce development by:

- Collaborating with other government departments, such as the Department for Education, to align education and training programs with the needs of the clean energy sector.
- Encouraging the integration of potential clean energy (based on a wide definition of energies based on a full lifecycle analysis – rather than picking winners) and energy efficiency topics into school curriculums to foster interest and awareness from a young age.
- Providing resources and guidance for businesses to develop and implement effective workforce development strategies. In particular looking to provide comprehensive support for such strategies and existing funding e.g. following up on government support for CCUS, hydrogen and lower carbon fuels projects with aligned support for the necessary workforce to deliver them too.
- Promoting diversity and inclusion in the clean energy workforce, ensuring that opportunities are accessible to all, regardless of background or circumstance.
- Provide clarity regarding SBTi for sectors such as oil and gas, and power so strategies can be aligned to the science-based targets to reduce emissions in line with the Paris Agreement goals.

- Encourage partnerships between universities and businesses to improve the transition from education to employment in the relevant engineering sectors required to deliver clean energy, ensuring all relevant university talent is utilised.