

## NET ZERO

# Retraining and upskilling for a just transition

**As the energy transition gathers pace, much of the focus has been on the technologies needed to make it happen. Less attention has been given to the needs of the energy workforce. Here, Daniel de Wijze explores the issue of upskilling and retraining in the context of a just transition.**



**T**he energy industry is undergoing a major transition as we move towards a net zero world. New low-carbon technologies and energy sources are becoming more widespread, and work is ongoing to clean up or phase out polluting fossil fuels. The technologies and capital needed are available, but it is crucial that the energy workforce is also prepared and ready for the transition.

The issues of skills and training are often overlooked, yet the challenge is huge. In order to avoid a damaging skills gap in the workforce, the industry must work simultaneously on attracting talented new energy professionals, while ensuring that current workers are valued, and not left behind.

## Transferable skills

Skills and training form a vital piece of a 'just transition', that is, an energy transition where vulnerable workers and communities are protected.

At present, many vulnerable workers are struggling – legacy

occupations, often in the oil and gas sectors, are threatened by growing digitalisation and automation, coupled with falling oil prices and reduced demand (in part due to the COVID-19 pandemic). Workers have already had to navigate stressful 'boom and bust' cycles, where jobs are lost or become less secure based on energy prices. With more countries and businesses pledging to reach net zero, job security in these areas will continue to be a problem.

However, even as the number of traditional energy jobs shrinks, skilled workers will be able to transition successfully to new areas of the industry where there is a strong demand for talent. This is because many of the key skills in different energy sectors overlap, such as business support, construction and installation, facilities management and electrical engineering.

For example, analysis co-published by Friends of the Earth, Platform and Oil Change International reveals that offshore

oil and gas workers can transfer successfully into many other energy sectors, including decommissioning, offshore wind construction and marine renewables.

A just transition is one that will be worker led – and that requires workers being willing to make a change. Morale may be low for people who face the prospect of losing jobs that they love, but they will move to new sectors if they have the guarantee of a secure, well-paid role at the end of the journey.

In Canada, non-profit Iron and Earth helps oil sands workers to make the transition into renewable energy projects, guaranteeing a new, stable career path. In the UK, Drax has recently signed a deal to train its future clean tech workforce – workers will switch from servicing coal plants to being involved in biomass or bio-energy with carbon capture and storage (BECCS) projects.

## Upskilling and retraining

As the nature of the energy industry changes, the workforce's required skill set will change too, and almost all workers will need some level of upskilling (refresh or development of skills) or retraining (learning a new vocation or set of skills). Upskilling is referenced in the landmark UK Committee on Climate Change *Net Zero report*, which states that 'the low-carbon skills gap must be tackled. For example, new skills support... is urgently needed for low-carbon heating, energy and water efficiency'.

This is not just an energy industry problem – CBI and McKinsey estimate that in the UK around 90% of the current workforce, some 30mn people, will need to be reskilled by 2030, in core areas such as digital, teaching and training, STEM knowledge and critical thinking.

There may be initial reluctance from both workers and leadership to invest in retraining and upskilling, but the benefits will be enormous. Upskilling can boost gross value added, increase businesses' competitiveness, and save the costs of rehiring. Workers

Offshore oil and gas workers can transfer into offshore wind

Photo: EI

**To achieve the pace of change required for net zero, 117,000 new energy sector jobs will be required in the UK by 2030 – this includes civil, mechanical and electrical engineers, data analysts and skilled tradespeople**

will gain greater job satisfaction from moving to more secure, well-paid jobs where they can make use of their talent and experience and are less likely to need state support.

Businesses will inevitably lead the way in training their employees, but they will need guidance and support from governments. Policy incentives will be required, particularly for SMEs that have less bandwidth available to dedicate to skills and training.

Examples suggested by the CBI include creating a skills and training levy to replace apprenticeships; and collaborating with further education institutions to provide loans for flexible/online learning. A culture must be promoted where individuals are encouraged to invest in their own learning and self-development, and this starts at the very top – leaders should promote their own upskilling and retraining journeys.

#### **Attracting young professionals**

According to National Grid, to achieve the pace of change required for net zero, 117,000 new energy sector jobs will be required in the UK by 2030. This includes civil, mechanical and electrical engineers, data analysts and

skilled tradespeople.

Speaking at the recent Net Zero Skills summit, National Grid CEO Nicola Shaw expressed her concerns about the tough competition the energy industry faces for talented young professionals. For example, more than 40% of recent physics graduates (whose skills make them well-suited for energy industry jobs) preferred to pursue careers in finance, banking and technology, not science and engineering.

In order to attract talent, the energy industry should focus on advertising roles with a clear social purpose. This is increasingly motivating the decision-making of young professionals. For instance, a recent survey for the Energy Institute's Generation 2050 initiative revealed that almost 60% of surveyed young energy professionals chose to work in or study energy in order to tackle climate change. There is an opportunity here for the industry shed its reputation as a polluter and refocus around the net zero goal.

Additionally, the industry must ensure that it improves the diversity of talent joining the ranks, increasing the proportion of women and ethnic minority professionals. Data for 2020 collected by POWERful Women reveal that for the top 80

energy companies in the UK, just 21% of board seats are filled by women, and over one-third of companies have no women on their boards at all.

Fixing this problem will involve boosting the amount of diverse talent in the STEM pipeline, but also requires more representation at the top levels of the industry, in order to provide role models for young professionals and students.

The energy transition is gathering pace, and facilitating the growth of a skilled, net zero workforce is a critical piece of the puzzle. As the energy industry looks towards a green recovery from COVID-19, it must seize the opportunity to ensure that its workforce has the support and tools needed to do the work that must be done. ●

The Energy Institute aims to provide a voice for young professionals studying and working in energy around the world, with its Generation 2050 initiative. Find out more about asks of young energy professionals by reading our Generation 2050 Manifesto:

[www.energy-inst.org/generation2050](http://www.energy-inst.org/generation2050)

Daniel de Witte is an Energy Analyst at the Energy Institute.

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