All Party Parliamentary Group on Hydrogen

All Party Parliamentary Group on Hydrogen, Non-Verbatim Minutes – The hydrogen economy and jobs for the future

DATE: Tuesday 22 June 2021

TIME: 11:00-12:00

METHOD: Zoom Meeting

CHAIR: Jacob Young, MP for Redcar and Chair of the APPG on Hydrogen

SPEAKERS:

- Anna Markova, Trades Union Congress (TUC)
- Jenny Young, Head of Strategy, Policy and Insights, Engineering Construction Industry Training Board
- Steve Barrett, Director of Strategic Accounts, Energy & Utility Skills

Jacob Young welcomed attendees and opened the meeting.

Anna Markova introduced herself, her background and role assessing green jobs of the future and discussed the TUC's research into future green jobs. The research proposed creating 1.25 million jobs through an investment of £85 billion over two years, primarily through electrifying railways and including retrofitting homes. She said that the current investment from the government is not enough, both in green energy generally and hydrogen specifically. Examples include France and Germany, in both public and private clean energy investment. She concluded by stating that she sees hydrogen as the cornerstone of the green economy.

Jacob Young thanked Anna Markova and handed over to Jenny Young.

Jenny Young briefly introduced herself and ran through her background, stating that her role covers oil and gas, renewable energy, biomass and nuclear energy, as well as both design and installation of green technology. She stated that the Industrial Decarbonisation Strategy will rely on low-carbon energy and that fossil fuel usage is inevitable for the short-term future concluding that "we can't neglect the current skills base, as core engineering skills will remain even in the hydrogen economy" There are significant barriers to training workers up in advance of the skills transition, raising the question of where the first hydrogen economy clusters would be located. This will determine geographic skills distribution –as mobility is important. She said that hydrogen-related skills are likely to be integrated into existing roles with additional training, rather than necessitating the creation of entirely new roles. She noted that engineering construction pathways are normally 3-4 years minimum to develop a new skillset and that developing new skills pathways needs to be done with this in mind. In summary, the hydrogen economy's skills demands will be complementary to existing roles, not exclusive to new ones.

Jacob Young thanked Kenny Young and handed over to Stephen Barrett.

Stephen Barrett introduced himself and ran through his background, stating that Energy & Utility Skills are responsible for working with industry to *"convert unknowns into knowns"*. He said that they had launched a workforce skills strategy, focusing on six key priorities to ensure the sector can deliver on the transition to net-zero. They have developed a hydrogen competency framework – a requirement for separate certification and skills processes for hydrogen engineers versus natural gas engineers. He said this was a significant success, providing a roadmap for a hydrogen apprenticeship to become a reality. Upskilling needs to be provided to all gas engineers, though some bespoke hydrogen roles will exist. This would normally take 4-5 years, so we can't underestimate the time and investment needed. He concluded by noting that safe hydrogen deployment is critical to maintaining consumer confidence.

Jacob Young thanked Stephen Barrett and opened up the session for questions from the audience. He asked Anna Markova what more the Government should be doing to incentivise skills reform to suit the hydrogen economy.

Anna Markova said we need to see a connected approach to skills across the renewable energy sector. We need to recognise skills gained on the job, i.e. through portfolio assessments. We also need recognition from the Government of where technology and industry are changing. Skill retraining time must be paid properly for workers.

Stephen Barrett said we need to look at swifter options than the apprenticeship levy. Bespoke training programs are needed – an apprenticeship program normally needs 2 years to develop and 2-3 years to train, This needs to be quicker. We need levy flexibility and improved hydrogen representation in apprenticeships.

Jacob Young asked Jenny Young what role universities and colleges can play in developing these courses, asking if we could see degree apprenticeships in hydrogen.

Jenny Young said the industry is developing quickly and the FE sector needs to keep up – FE investment is critical to enable this. She added that we are too heavily reliant on Level 3 and 4 roles.

Jacob Young asked Anna Markova what government and industry can do to support the rollout of the upskilling required.

Anna Markova said there are three parts to the answer. Firstly, we need more funding certainty, with a long-term funding settlement. Secondly, the Government needs to look ahead and think about future skills shortages and challenges, such as meeting employer demand – what about when renewable energy properly takes off? Thirdly, the Government needs to create centres of excellence to provide upskilling for staff to prepare for the net-zero economy. These three things combined would help a lot.

Jacob Young opened the floor up to employers' questions. He asked how they are equipping apprentices with green skills, what their priorities were and which sectors would be decarbonised first.

Stephen Barrett said utilisation around the Hydrogen Competency Framework was central and that hydrogen distribution was critical – we need the infrastructure to be hydrogen-ready, not just the workforce. That said, it is important not to over-egg the scale of change needed – hydrogen is still a gas and the infrastructure won't have to change completely.

Melanie Taylor said Northern Gas Networks was working with significant numbers of apprenticeships, and their apprenticeship program was consistently oversubscribed. She said it

was important to get a base of apprenticeships trained up then expand that out as the hydrogen economy grows.

Thomas Brewer added that upskilling is needed globally Blue hydrogen is functionally irrelevant in anything but the short-term, so the long term focus needs to be on green hydrogen. Public engagement so far has been positive. He said that he doesn't think the transition will be massive and believes it could be organic, not necessarily needing a massive amount of government support behind it.

Jenny Young added that the transition will be spread out from initial clusters. She noted that the transferability of competencies is key, with mechanisms to allow critical portability of She stated that 'top-up' training for apprentices could be a possible option, and that the skill transition will be more incremental.

Jacob Young asked Anna Markova what optimum hydrogen capacity should be by 2030.

Anna Markova said it was best not to give a specific number, but noted that if we are seeing a long-term transition to green hydrogen, it needs to be invested in properly, otherwise blue hydrogen would go from a short-term bridge to a long-term sub-optimum solution.

Stephen Barrett added that additional modules will need to be built into gas safety training when hydrogen is rolled out widely.

Jacob Young asked for final thoughts on the skills needed in the forthcoming Hydrogen Strategy.

Jenny Young said support was needed for pump-priming of the skills changes needed.

Anna Markova said the current Government has shown willingness to learn lessons by pressuring the industry to move towards clean energy and said the Hydrogen Strategy needed to lay out how to create the maximum number of new jobs.

Stephen Barrett said clear roadmaps were needed.

Jacob Young thanked attendees and wrapped up the discussion.