

Nuclear Industry Association Response to the Energy Security and Net Zero Committee's 'Workforce planning to deliver clean, secure energy' inquiry.

The Nuclear Industry Association (NIA) welcomes the opportunity to respond to the Energy Security and Net Zero Committee's 'Workforce planning to deliver clean, secure energy' inquiry.

The NIA is the trade association and representative body for the civil nuclear industry in the UK. We represent more than 300 companies operating across all aspects of the nuclear fuel cycle, including the current and prospective operators of nuclear power stations, international designers, and vendors of nuclear power stations, and those engaged in decommissioning, waste management and nuclear liabilities management. Members also include nuclear equipment suppliers, engineering and construction firms, nuclear research organisations, and legal, financial and consultancy companies.

Due to the diversity of our membership, our views in this submission will cover high-level, industrywide matters. Our members may choose to make their own detailed submissions.

Executive Summary

The civil nuclear sector has a long history of delivering innovation and investment, creating highly skilled jobs, and providing low carbon power across the UK. The number of people working in the civil nuclear industry in the UK is at its highest level ever with over 86,000 people employed across the sector.¹ Major new nuclear projects have helped drive a 60% increase in the number of jobs in the sector in the last decade.² Innovations in advanced nuclear technology have also helped drive the number of jobs in the sector, with a growing workforce of over 700 people involved in the development of Small Modular Reactors (SMRs).³

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?

- a) It is vital, if we are to meet future energy demand whilst contributing in a meaningful way to the need to decarbonise homes and industry, that the full value of the nuclear industry is recognised and utilised in enabling the realisation of those demanding objectives.

¹ Nuclear Industry Association (2024), *Jobs Map*. Available at <https://www.niauk.org/nia-jobs-map-2024/>.

² Nuclear Industry Association (2024), *Nuclear jobs hit record high as major new projects revitalise sector*. Available at <https://www.niauk.org/nuclear-jobs-hit-record-high-as-major-new-projects-revitalise-sector/>.

³ Nuclear Industry Association (2023), *Record growth in nuclear workforce from new build projects*. Available at <https://www.niauk.org/record-growth-in-nuclear-workforce-from-new-build-projects/>.

- i) The nuclear sector provides jobs and bolsters the economy through very high UK content and skills creation. There is further opportunity for nuclear to be utilised in providing district heating to decarbonise domestic and commercial buildings, which is a well-established use of nuclear technology particularly in northern European due to the cold climate and long heating periods which create favourable conditions for district heating and cogeneration development. The Ågesta heavy water reactor in Sweden is an example of this.
- b) Whilst the UK has an existing nuclear capability, the Government must address the skills gap in the sector so that we have the right people, in the right roles at the right time to deliver projects, including those that can support decarbonisation objectives.
 - i) We would encourage Government to further support initiatives to allow those currently working in nuclear sector to train the next generation, to avoid losing existing essential skills.

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?

- a) The National Nuclear Strategic Plan for Skills has identified that 40,000 new jobs will need to be filled by 2030 to meet growing demand in the nuclear sector in pursuit of the Government's Clean Power 2030 and Net Zero 2050 goals.⁴ This will require a 200% increase in the number of graduates and apprentices entering the nuclear workforce by 2025/2026. The current recruitment rate for the sector will need to be more than doubled to meet this goal by 2030.
- b) We would encourage Government to support the development of partnerships across the nuclear sector to encourage skills transfer and attract new talent.
- c) We would encourage Government to continue with efforts to double the number of graduates and apprentices and quadruple the number of specialist science and nuclear fission PhDs.
- d) We would encourage Government to enhance training capacity and capability for workers in the UK to ensure that new entrants to the sector meet the skills demands of the growing industry.

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?

- a) A supportive policy and regulatory environment is key for attracting and retaining talent in the sector.

⁴ Nuclear Skills Delivery Group (2024), *National Nuclear Strategic Plan for Skills*. Available at <https://nuclearskillsdeliverygroup.com/wp-content/uploads/2024/05/NSDG-National-Nuclear-Strategic-Plan-For-Skills.pdf>.

- b) We would encourage Government to take a programmatic approach to the construction of nuclear power plants to ensure the job market in nuclear energy roles is sustainable enough to incentives private sector investment in training.
 - i) While jobs in the sector have grown from 54,515 in 2014 to over 86,908 in 2024, urgent decisions are needed on the next wave of projects to keep up this momentum and sustain growth.⁵
 - ii) A clear programme of projects provides the career prospects necessary to draw in new workers into the sector, with the promise of work for many years. A single project will struggle to achieve this.
 - iii) A programme of new nuclear projects also creates an order book that allows companies to justify investment in training, re-skilling and other professional development of the workforce to improve retention and productivity.
- c) Government backing on long-term decommissioning projects, alongside access to and continuity of funding, is essential to encourage supply chain partners of the decommissioning sector to invest in future skills needed beyond 2030, and ensure an adequate workforce is in place to meet the future demands of the sector.
- d) Furthermore, the introduction of a UK Green Taxonomy and the inclusion of nuclear in the existing Green Financing Framework is critical for stimulating private sector investment into the nuclear sector and other clean energy industries.

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

- a) We would encourage the Office for Clean Energy Jobs to align with existing government policies and commitments, including the National Nuclear Strategic Plan for Skills, the Clean Power 2030 Action Plan, and Net Zero 2050 – and continue engagement with industry.⁶⁷⁸⁹

⁵ Nuclear Industry Association (2024), *Jobs Map*. Available at <https://www.niauk.org/nia-jobs-map-2024/>.

⁶ Nuclear Skills Delivery Group (2024), *National Nuclear Strategic Plan for Skills*. Available at <https://nuclearskillsdeliverygroup.com/wp-content/uploads/2024/05/NSDG-National-Nuclear-Strategic-Plan-For-Skills.pdf>.

⁷ Department for Energy Security and Net Zero (2024), *Clean Power 2030 Action Plan: A New Era of Clean Electricity*. Available at <https://assets.publishing.service.gov.uk/media/675bfaa4cfbf84c3b2bcf986/clean-power-2030-action-plan.pdf> Available at <https://assets.publishing.service.gov.uk/media/675bfaa4cfbf84c3b2bcf986/clean-power-2030-action-plan.pdf>.

⁸ Department for Energy Security and Net Zero (2024), *Clean Power 2030 Action Plan: A New Era of Clean Electricity – Assessment of the clean energy skills challenge*. Available at <https://assets.publishing.service.gov.uk/media/675b3171348e10a16975a422/clean-power-2030-clean-energy-skills-assessment-annex.pdf>.

⁹ Nuala Burnett, Suzanna Hinson, and Iona Stewart (2024), *The UK's plans and progress to reach net zero by 2050*. Available at <https://commonslibrary.parliament.uk/research-briefings/cbp-9888/#:~:text=Download%20full%20report-.The%20UK%20is%20committed%20to%20reaching%20net%20zero%20by%202050,warming%20and%20resultant%20climate%20change>.

- b) The Office for Clean Energy Jobs should recognise the scale of the skills challenge facing industries such as nuclear and ensure that suitable mechanisms and funding is available to accelerate the development of nuclear skills, focusing on working with market leaders to ensure skills development is targeted and relevant to upcoming programmes.
- c) This needs to be combined with a holistic cross-sector skills and supply chain mapping focused on adjacencies and transferable skills. This mapping would highlight the opportunities for standardisation and integration in the supply chain and skills pipeline.

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?

- a) We would encourage the Department to realise the objectives set out in the National Nuclear Strategic Plan for Skills to ensure a skilled workforce is in place to meet our clean energy ambitions.
- b) We would encourage cross-departmental collaboration between organisations involved in realising the Clean Energy Mission. Coordination between Great British Nuclear, Great British Energy, NESO, and the Department is essential to ensure the right workforce is in place to deliver the Clean Energy Mission.
- c) We encourage the Department to detail their long-term strategic vision of key infrastructure and grid mix beyond the Clean Power 2030 Action Plan, including how current nuclear programmes and skills will be sustained.
 - i) A horizon scan with scenario planning underpinned with clear funding milestones will provide firmer confidence to industry to look to invest in post 2030 skills development programmes.
- d) We would encourage the Department to continue to engage with industry to understand the needs of the sector and respond appropriately to future workforce demands.

Further Information

The NIA is happy to provide more context, or any clarifications desired on the content of our response and to ask our members where appropriate for additional information that may be useful.

Please contact Elisabeth Roden, Policy Analyst for the Nuclear Industry Association, at elisabeth.roden@niauk.org to do this.