

Nuclear Industry Association Response to the Economy, Trade, and Rural Affairs Committee's 'Nuclear Energy and the Welsh Economy' Inquiry.

The Nuclear Industry Association (NIA) welcomes the chance to respond to the Economy, Trade, and Rural Affairs Committee's 'Nuclear energy and the Welsh economy' inquiry.

The NIA is the trade association and representative body for the civil nuclear industry in the UK. We represent around 270 companies operating across all aspects of the nuclear fuel cycle.

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

Summary

- New nuclear projects in North Wales would transform the economy of the region, providing thousands of high-quality jobs for local people and billions of pounds worth of investment in the region. These projects would provide a shot in the arm to the Welsh engineering and industrial base and give young people in North Wales the chance to stay and build lives in the places where they grew up. They would give Wales the cleanest power in the United Kingdom and turn Wales into a clean energy export powerhouse.
- Wylfa is the best site in all of Europe for nuclear, capable of hosting four large-scale reactors or a mix of large and small-scale reactors.
- The UK Government should choose a large-scale reactor design for the next large-scale project after Sizewell C, before the end of this Parliament and should strongly consider deploying that at Wylfa as a top priority.
- Trawsfynydd has the potential to host some of the first Small Modular Reactors (SMRs) in the United Kingdom and should thus be assigned for the early deployment of the SMR design chosen by Great British Nuclear (GBN).
- The Government should be prepared to take equity stakes of at least 20% in projects at Wylfa and Trawsfynydd to lower the cost of financing and to provide investor confidence.

1. What potential economic impact could new nuclear developments in north Wales have on the regional economy?

- a) The nuclear industry is currently worth £700 million to the Welsh economy of which £100 million is direct impact, £400 million is indirect impact and £200,000 is induced impact.¹ The industry supports just over 800 direct jobs in the sector.²
- b) Wales has the dirtiest power of the three nations of Great Britain as it has no nuclear capacity to complement renewables and is thus highly dependent on gas-fired generation. Scotland has the cleanest power in Great Britain, and it has generated the most nuclear power proportionally of any nation in the country.
- c) Wales had nuclear power for more than 50 years, from the opening of Trawsfynydd Nuclear Power Station in 1963 to the closure of Wylfa Nuclear Power Station in 2015. Wylfa A provided power directly to the aluminium smelter on Ynys Môn, an early illustration of the nuclear's potential to support further industrial development.
- d) New nuclear development in north Wales would have a transformative impact on the local economy. The potential for new nuclear power at Wylfa is huge, with the site often being referred to as the best site for new nuclear in Europe.
- e) Due to the size of the site, Wylfa could host at least two large-scale reactors, and likely four large-scale reactors, or a mix of large and small reactors. Two large-scale reactors at Wylfa, for instance, could produce enough low-carbon electricity for 5 million homes, cut the UK's gas imports by 4.4bn cubic metres, provide 10,000 jobs during construction and 800-900 long-term jobs during operation, and add billions of pounds in opportunities to the UK supply chain. The station, in short, could host enough capacity to produce more electricity than what all of Wales consumes in one year.

¹https://www.niauk.org/wp-content/uploads/2023/01/Delivering-Value_Economic-Impact-Civil-Nuclear.pdf

²<https://www.niauk.org/nia-jobs-map-2023/>

- f) A station at Trawsfynydd could attract SMR projects worth billions of pounds if multiple units were deployed. There are many different SMR designs currently being developed that could potentially be deployed at Trawsfynydd.
- g) Nuclear projects have a proven record of transforming regional economies. In Somerset, two large scale reactors are currently being built at Hinkley Point C, driving investment in the wider South West region. As of April 2023, £5.3 billion had been spent directly with companies based in the South West and £139 million has been invested in local infrastructure and community support.³ 19,250 new jobs have been created as a result of the project with thirty-four per cent of the Hinkley Point C workforce being employed from the local area. Additionally, £24 million has been invested directly into education, skills and employment due to the project. The project has also seen a significant demand for Welsh steel with 200,000 tonnes going into the project to date. A nuclear project in Wales would also see a demand for Welsh steel.
- h) Nuclear power stations create local jobs and contribute tens of millions of pounds per year in wages, which is ploughed back into the local economy. Our current nuclear power stations employ between 500 and 550 full time staff at each plant. Two large-scale reactors at Wylfa could provide jobs for between 800 and 900 people.
- i) Each nuclear sector employee contributes an average of £102,300 in gross value added contribution to GDP, almost twice as high as the national average.⁴ For perspective, the gross median weekly pay for inhabitants of Gwynedd is £426.50 and £528 for those in Anglesey as of 2022 according to the Office for National Statistics.⁵

2. What can be done to ensure that any new nuclear projects maximise local employment and local or Wales-based supply chains?

- a) The best way to maximise local employment and local supply chains is for the Government to take at least minority equity stakes in future projects in Wales. Equity stakeholders have the most influence on the shape of the supply chain, and that is the best guarantee.
- b) We strongly supported the Government's commitment to building a project pipeline of nuclear projects in its 'Powering up Britain: Energy Security Plan' report published earlier this year; however, we would welcome answers to the following:
 - Which reactor technology will be used to deliver a further-large scale project?
 - How many reactors will be built?
 - Where will these new reactors be built?
 - Who will build and pay for them?
 - The order in which the reactors would be built.
- c) The Government should define the pipeline for new nuclear projects urgently to ensure that Welsh companies and others who worked or will work on Hinkley Point C and Sizewell C are able to shift smoothly to subsequent projects.
 - Nuclear industrial specialist Boccard has operations in North Wales and recently opened a new factory in Broughton, creating 200 highly skilled jobs, in support of Hinkley Point C. The facility has the potential to support other nuclear projects in Wales, maximising local employment and supply chains, however, it needs a strong order book to remain competitive.
- d) As part of the GBN SMR technology selection process, we would encourage UK content becoming a key competitive determining factor in technology selection. The value that vendors bring to the UK and Welsh industry should be considered and vendors should be required to maximise UK content where possible.

3. What challenges could current skills shortages pose and how can these challenges be overcome?

- a) The nuclear workforce needs to expand substantially to deliver the UK's 24 GW ambition of nuclear capacity, and to deliver new projects at Wylfa and Trawsfynydd as part of that. Currently, the UK has about 77,000 people in the civil nuclear workforce but will likely need close to 250,000 for the full programme.

³https://www.edfenergy.com/sites/default/files/hpc_socio_economic_report_2023_-_compressed.pdf

⁴https://www.niauk.org/wp-content/uploads/2023/01/Delivering-Value_Economic-Impact-Civil-Nuclear.pdf

⁵<https://www.ons.gov.uk/visualisations/areas/W92000004/>

- b) A clear programme of nuclear projects from Government is essential to overcome this skills challenge. Businesses will have the certainty to invest years in training new workers if the Government commits to a long line of orders that will be followed through. In addition, a clear line of orders will illustrate to new recruits that they can have a stable, long-term future in the civil nuclear industry.
- c) The Government already has the vehicle for national workforce planning across civil and defence nuclear in the Nuclear Skills Taskforce. We believe that the Nuclear Skills Taskforce should be charged with producing a workforce plan from now to 2050 integrating the civil nuclear construction pipeline with the nuclear submarine construction programme. This integration is essential to maximise supply chain activation and efficiency and minimise the cannibalisation of skills in one part of the nuclear sector by the other. Crucially, this plan should say what we need to do to get the people to deliver on-grid nuclear and new submarines, and not whether we can get the people.
- d) We must try to get the people to build the new reactors we want, and not settle for fewer reactors, less sovereign energy, fewer jobs, and more emissions because of our current skills constraints.

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 Lauren Rowe, Policy Analyst for the NIA, at Lauren.Rowe@niauk.org to do this.