

Written evidence submitted by Statera Energy (IND0015)

About Statera Energy

Statera develops, owns, and operates flexible generation and storage technologies that work to balance the grid in a renewables-led energy system, at the lowest cost to consumers. These technologies include grid-scale batteries, green hydrogen, pumped storage hydro and flexible generation. Today, Statera is a market leader in storage and flexibility with over 1GW of UK projects operational or in construction, and over 16GW in development or consented. Statera is developing two nationally significant projects in Scotland. Loch Kemp Storage is a 600MW pumped storage hydro project in the Highlands. Kintore Hydrogen is currently Europe's largest green hydrogen production facility. It is a 3GW plant in Aberdeenshire that will provide up to 3500 jobs a year during construction, and up to 200 permanent operational jobs. In total, it could bring up to £1bn to the UK economy by 2035.

How can UK plc capture its fair share of the economic potential of emerging or less developed energy technologies?

- The UK has significant potential to become a world leader in green hydrogen, particularly in manufacturing hydrogen electrolyzers and fabricating electrolyser plants.
- The domestic supply chain is well-positioned to produce and assemble electrolyser stacks and modules, leveraging existing expertise in modular fabrication from the oil and gas sector.
- Unlike with other technologies in the Clean Power 2030 plan, such as wind, solar, and battery energy storage, where around 80% of the capital value of the project is imported from OEMs located in other countries, the electrolyser stack costs around 20% of an electrolytic hydrogen project. This means there is the potential for the rest of the value to be procured from local fabrication yards and contractors looking to diversify away from Oil and Gas, which could provide critical support for those who are otherwise disadvantaged by the energy transition.
- A clear and sustained pipeline of projects is critical to give fabricators and suppliers the confidence to invest in plant, machinery, and workforce development.
- Positive policy decisions on hydrogen networks and transmission blending are needed to unlock this potential as they will provide certainty to developers and potential offtakers on a route to market for the hydrogen produced.

What more can the Government do to encourage greater domestic supply chain investment in the energy industry by 2035, including through the Contracts for Difference scheme?

- Provide certainty on timeframes and targets for hydrogen production to drive investment.
- Address inconsistencies in support mechanism applications related to cost versus local content requirements. It is challenging for developers to know how much Government values using local content that comes at a higher price when cost pressures are usually the driving competitive factor.
- Government or another body such as the National Wealth Fund or Great British Energy could underwrite risk for smaller companies, enabling them to scale and compete for larger projects. Currently, for developers like ourselves developing large-scale projects, using a smaller provider brings financing challenges as the risk of the supplier for a critical element of the plant, such as the electrolyser stack, being unable to fulfil its obligations and going into liquidation is too high for many financing

institutions. This prevents domestic companies from being able to take on larger projects and scale up at pace, even when they have the technical capability to do so.

- From a pumped storage hydro perspective, the sector is reliant on a limited pool of overseas suppliers. These suppliers are responsible for not only the manufacture and installation of equipment but also the training of local UK labour to commission, maintain and operate that equipment. There are concerns around the ability of these companies to secure working visas for overseas staff and the timescales involved, particularly given that the nature of project delivery often necessitates unplanned and immediate requirements to bring in specialists from overseas.

Does the UK have the supply chain capacity to deliver the required energy infrastructure by 2035, including an expanded electricity network?

- The UK's process industry has a proven track record, having delivered £350bn in capital investment for offshore oil and gas over the past 40 years.
- Capacity can be scaled rapidly if there is consistent demand for its services.
- That being said, the supply chain is constrained in the construction industry, in areas such as skilled heavy civil engineering personnel and equipment, tunnelling capacity and materials production.

To what extent would growing the domestic supply chain bolster UK energy security?

- Expanding the domestic supply chain would reduce reliance on international markets and enhance self-sufficiency in manufacturing hydrogen infrastructure.
- This would directly support UK energy security by ensuring greater control over critical supply chains.

What are the key concerns with respect to the availability of raw materials in the supply chain and how might those be addressed?

- Currently, raw material availability is not a major constraint, as key materials (steel, copper cable, cement, pipework) are readily available in the UK. That said, volatility in steel prices makes it difficult to forecast capital expenditure over the long duration of major energy project delivery.
- Rare earth metals (e.g., iridium and platinum) are imported, but suppliers remain confident in meeting demand and are optimising their use.
- There is no longer a domestic supply of GGBS, a key constituent of concrete. This has introduced a long lead item into the supply chain for the procurement and delivery of concrete in the quantities required by major energy schemes.

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