

Written evidence submitted by Energy Networks Association (IND0025)

Introduction

ENA is the industry body representing the electricity networks in the UK.

Our members directly employ 26,000 people in England, Scotland, Wales and Northern Ireland, including around 1,500 apprentices and trainees.

Our members are spending and investing £33bn with more than £22bn going into our electricity distribution networks between 2023 and 2028, and nearly £11bn in our electricity transmission networks between 2021 and 2026.

Our members operate a network of around 500,000 miles of lines and cables which deliver electricity to around 29 million homes and businesses across the country.

Summary

The UK has consistently been a leader in the transition to clean power, and Britain's energy networks have a strong track record of delivering reliable infrastructure that remains in place for generations. To maintain this leadership and enable the transition to our new clean power by 2030 target, long-term stable policy and regulatory regimes are crucial for building up the supply chains that will help upgrade energy infrastructure.

To encourage greater domestic supply chain investment by 2035, the government should provide long-term policy and regulatory certainty to networks on the projects they need to develop, allowing them to attract investment and build robust supply chains. The regulatory framework should also be reflective of the significant investment needs of networks and the heightened risks that investors need to take.

Delivering the Clean Power 2030 mission will require a secure, long-term supply chain for skills as well as materials and manufacturing capability. Networks need firm orders to invest in UK manufacturing facilities and skills. A holistic approach to supply chain development, considering skills and collaboration across the industry, is necessary.

Growing the domestic supply chain can bolster UK energy security by reducing reliance on imports for parts and materials, as well as minimise risks from geopolitical tensions. As our networks touch every part of the country, investing in domestic supply chains can create jobs and stimulate economic growth right the way across the UK.

ENA is happy to support the Committee in this inquiry further as needed. If you have any questions on the points set out in our response, please contact Daniel Clelland at Daniel.clelland@energynetworks.org / 07701040204.

Questions

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

1. The UK has taken a world leading role in the energy transition and been a leader in adopting and connecting new technologies, with Britain's energy networks enabling the transition away from fossil fuels and towards a renewables dominated system.

2. Britain's energy networks have a long track record of delivery when it comes to testing, adopting and deploying innovative new technologies to the network. Ofgem managed innovation funding, through the Strategic Innovation Fund and National Innovation Allowance, have enabled networks to build up long term expertise to the benefit of customers.
 - a. Britain's energy networks have been able to deliver further automation in the system to help identify network faults remotely, improve network planning and forecasting abilities ahead of storms and bad weather and developed a platform that uses AI to give customers a near instant decision connecting domestic low carbon technologies.
3. To ensure the UK continues to be a leader in developing and deploying emerging and innovative technologies, long term and stable policy and regulatory regimes that allow networks to attract investment for the research and development of new technologies is crucial.
4. These programmes also have an unprecedented level of collaboration. We have around 3,000 registered innovation projects, either implemented or in delivery. 95% of projects involve two or more networks and 88% involve a third-party partner from the wider world, with requirements to share knowledge and learning once projects are delivered.
5. There is also a need for government to streamline approval processes, provide clear guidelines and offer incentives for early adopters.
6. More broadly, the government's stated plans for GB Energy include plans to invest in new and emerging technologies with the private sector. While ENA has no view on the technologies that GB Energy is investing in, there will need to be the infrastructure and capacity in place so that these projects can connect to the network. This will require reform to the planning system to make it quicker to deliver the required upgrades and expansion at both transmission and distribution, as well as sort out access rights for maintenance.
7. ENA has developed a nine-point plan for planning reform which we have submitted to the Department for Energy Security and Net Zero¹.

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?

8. As mentioned in our response to question one, energy networks need long term policy and regulatory stability to attract investment, and long-term certainty around delivery of projects. For networks to invest in domestic supply chains, they need:
 - a. Certainty of need and investment with approved strategic plans for energy as well as approved through the planning process. The long-term approval of projects will create huge opportunities for networks to invest to develop UK based skills and supply chains.

¹ <https://www.energynetworks.org/publications/common-sense-planning-plan>

- b. A long-term pipeline of projects to deliver, which could mean getting portfolios of projects agreed to, rather than on a project-by-project basis.
 - c. Regulation that considers the significant investment that will need to be raised from competitive international markets, as well as the heightened risk that will be faced by networks in the next price control period. This includes the scale and pace of investment programmes, competing supply chains and workforce availability, and the risks posed by climate change and cyber-crime.
9. Whilst the Government develops plans for GB Energy, there could also be consideration of their role in securing supply chain capacity.
10. The Government can encourage greater domestic supply chain investment by providing a clarity and certainty to networks on what needs to be delivered. Clear and consistent policy and regulatory frameworks allows the networks to plan for future needs, allowing earlier supply chain engagement and commitment which will encourage supply chain investment. Policy decisions should be made in a clear and timely manner so that customers can adapt, and the most efficient solutions can be found.

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

11. Delivering the government's mission of Clean Power 2030 will demand secure, long term supply chains. Networks operate and source capital from competitive global markets, and contract with the supply chain to deliver where it can get the certainty required. To ramp up the domestic supply chain relies on networks making on firm orders to make their own investments in UK manufacturing facilities and investment in the resource and skills required.
12. To support the acceleration of the delivery of energy infrastructure by 2035 will require a different approach to supply chain development and engagement, including a holistic approach that considers the skills required in parallel, collaborate across industry and create greater standardisation to drive efficiency.
13. To attract investment through policy and regulation we need to make sure that networks are fully enabled to build. Britain has a gold star reputation on the international stage which is driven by its long-term policy and regulatory stability which allows investors, the networks and wider industry to plan.
14. The Accelerated Strategic Transmission Investment (ASTI) framework is a great example of an approach to strategic delivery that shows how supply chains can be built earlier and quicker, infrastructure can be delivered quicker, and investment be unlocked.
15. For networks, supply chain is only half of the puzzle; efforts need to be complemented by serious and considered reform to the planning regime. Currently, it can take up to 10 years to deliver a major infrastructure project, three years to build and seven stuck in the planning system. We cannot reach the Government's Clean Power Mission by 2030 without enabling networks to build faster. Giving this certainty will help networks with their long-term planning and investments in supply chains.

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

16. Increasing domestic production of energy and the supply chain for energy infrastructure can support energy security by giving more and faster access to the parts and skills that can support building and maintenance of the network. This is more secure to UK companies as it reduces exposure to geopolitical disruption, as seen with gas prices following the Russian invasion of Ukraine.
17. Britain's energy networks have an unparalleled geographic footprint that covers every home, business and community. Developing domestic supply chains and growing the skills base will see considerable investment spent across the country, not just large towns and cities.

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

18. Please refer to our member submissions for information on this subject.

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