RWE Reflections

Unlocking the Potential of Clean Energy

How can a modern Industrial Strategy support progress to Clean Power by 2030?

Alice Barrs, RWE's Head of UK Corporate Affairs, explores the Government's proposals for a modern Industrial Strategy and how it can support reaching Clean Power by 2030

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The inclusion of clean energy in the Industrial Strategy green paper is welcome.

By aligning industrial policy with the nation's net zero target, the energy transition can support economic transformation across the UK, driving high-quality jobs and sustainable domestic supply chains in our industrial heartlands and coastal communities.

To be a success it needs to:

1

Make strategic interventions that truly crowd-in private investment

2

Focus on clean energy supply chains where the UK can have the greatest competitive advantage

3

Drive policy clarity, certainty and pace to drive investment

4

Develop the workforce of tomorrow

1

Make strategic interventions that truly crowd-in private investment

Targeted state interventions can ensure that industrial policy complements private sector activity. However, additionality is key – it must not simply displace private sector activity.

State intervention is most effective in leveraging private investment where there is market failure. A good example is port infrastructure: here, the private sector lacks the necessary resources to fund long-term investment, with individual orders from offshore wind farms insufficient to justify investment decisions.

If the UK is to reap the full socio-economic benefits of offshore wind, long-term strategic investment in port infrastructure is required and government can play a valuable role in facilitating this.

In emerging markets like hydrogen, state support is also critical. While the Hydrogen Production Business Model (HPBM) offers a valuable framework for investment, the absence of transport and storage (T&S) infrastructure hinders the market's development.

Hydrogen faces a "chicken and egg" problem, with supply and demand required to grow **simultaneously. By stimulating investment in hydrogen T&S infrastructure, the Government can catalyse the hydrogen economy, reducing costs and driving innovation.**

> **Additionality is key – state intervention must not simply displace private sector activity**

2

Focus on clean energy supply chains where the UK can have the greatest competitive advantage

The green paper rightly identifies clean energy as a key driver of economic growth, job creation, and regional development. It's important that the strategy should focus on where the UK has the greatest opportunities to create thriving supply chains and to be a global leader.

Emerging technologies such as hydrogen and carbon capture and storage (CCS) present unique opportunities for the UK to develop a competitive edge, but require targeted government support to unlock their full potential. In particular, for CCS, the UK's natural geography combined with decades of oil and gas experience in the North Sea means that we are uniquely well-placed to be a world-leader.

To ensure industry can deploy carbon capture at scale, it's essential that the forthcoming Comprehensive Spending Review commits to funding the next phases of projects and stores. It is also imperative that the CCS support framework enables non-pipeline transportation of carbon via shipping.

As well as playing a major role in our domestic decarbonisation efforts, carbon shipping presents a significant international trade opportunity for the UK.

Whilst a more established technology, with increased global interest in the energy transition, offshore wind projects are facing greater competition to secure requisite parts and the supply chain has become increasingly strained. Supply chain opportunities and challenges in the UK can be addressed with the right policy action.

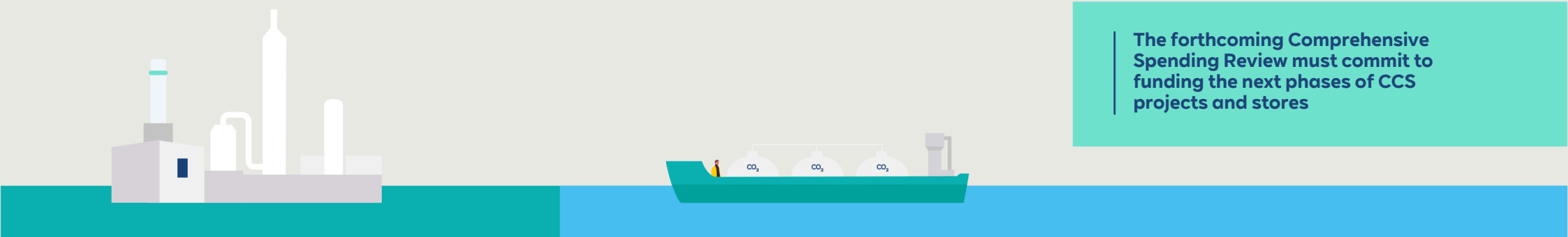
The Offshore Wind Industrial Growth Plan (OWIGP) report looked at how the UK could triple offshore manufacturing over the next 10 years (creating up to £25 billion of additional GVA over the 10 years post-investment and 10,000 accumulative additional jobs annually). It identified five technology subsectors within offshore wind where the UK should prioritise investment – including the design and manufacture of offshore wind blades and turbine towers, foundations, cables and other key components.

RWE fully supports the conclusions of the OWIGP assessment and would encourage government to use this extensive, well-evidenced piece of research as the foundation for the Industrial Strategy for the offshore wind sector.

RWE's flagship Sofia offshore wind farm, currently in construction 195km off the North East coast, is a great example of tangible socio-economic benefits that offshore wind can bring. Recent independent analysis estimates the project will generate 8,810 full-time equivalent (FTE) person-years of employment, with up to 2,000 jobs supported at peak during construction.

RWE's total investment in Sofia is expected to be over £6 billion, of which 50% will be UK content, generating £760m of value for the UK economy, including £181m for Yorkshire and Humber and £62m for the North East.

> **The forthcoming Comprehensive Spending Review must commit to funding the next phases of CCS projects and stores**



3

Drive policy clarity, certainty & pace to drive investment

As evidenced by Sofia, investment in clean energy is already delivering substantial economic and employment benefits to the UK.

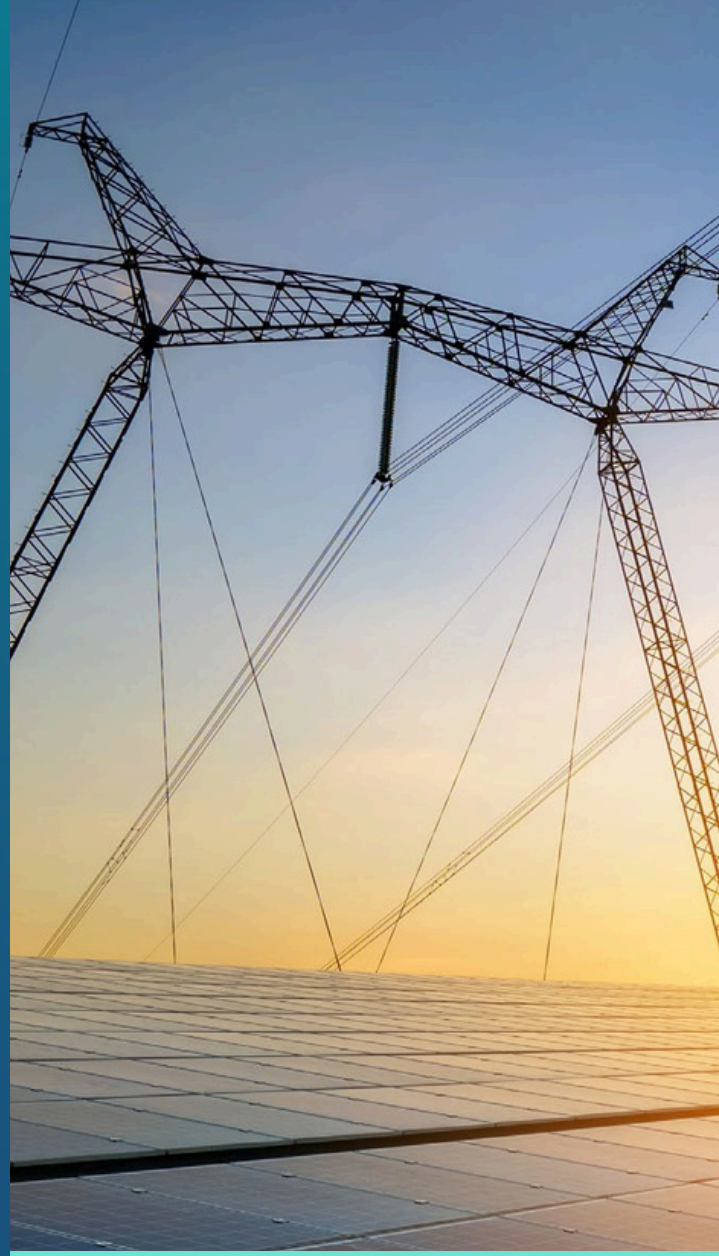
However, no single project or developer can drive the level of supply chain investment needed to scale the sector. In addition to strategic state investment, developers and the supply chain require greater clarity and certainty about the long-term project **pipeline. We therefore strongly welcome the Government's 'minded to' position in the Clean Power Action Plan to establish an auction schedule for the Contracts for** Difference (CfD), including capacity ambitions for upcoming allocation rounds, to improve transparency and predictability.

The Action Plan also set out the concrete steps being taken to streamline and accelerate planning approval of new energy infrastructure, **including a commitment to review resourcing within the planning system, something that RWE has long called for. We also welcome the** steps taken by the National Energy System Operator (NESO) to unblock the grid connection queue by fast-tracking the most advanced projects that can contribute to the target to the front of the queue.

It is clear that prioritising the delivery of projects that are most advanced in their development will be critical to meeting the 2030 target. RWE **therefore does not support the option put forward in the Action Plan to allow projects without planning consent to be eligible to enter the CfD.**

Given the UK pipeline of projects with consent is already sufficient to comfortably meet even the more stretching Clean Power 2030 scenario, adding riskier, earlier stage projects to the auction approach will do nothing to improve delivery of targets. Furthermore, more advanced, consented projects with supply chain orders could lose out to less developed projects that have not made similar commitments or even started the procurement process.

This would have a damaging impact on the supply chain as projects may be forced to cancel orders. Our experience in international markets shows that supply chain companies will not engage with projects until they have secured consent, meaning if projects without consent win CfDs there would be delays to supply chain investment until consent is secured, and much higher risks of delay or project termination in the event of price increases between CfD and planning consent award.



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4

Develop the workforce of tomorrow

The UK's clean energy workforce is at a crossroads. Roles such as specialist engineers, technicians, and digital experts are facing a skills shortage, while demand for finance and analytical skills is also growing.

Without action, these shortages risk undermining the sector's ability to reach the 2030 Clean Power target, and limit the potential benefit of the clean energy transition to our economy and our communities.

We therefore welcome the establishment of a new arms-length body, Skills England, and the new Office for Clean Energy Jobs to take coordinated action to incentivise training, retraining, and apprenticeships within the clean energy sector.

As a business active across England, Scotland and Wales, we particularly welcome the commitment of Skills England to work with the devolved administrations to bring closer alignment to facilitate the ability of companies to work across borders.

We would urge focus on:

Apprenticeship Levy reform to allow use for other types of training and the introduction of the foundation apprenticeship. However, we are concerned that the Government is considering removing use of Apprenticeship Levy funding for Level 7 degree apprenticeships (i.e. post graduate), which are an important route for bringing people in career changes from other sectors (such as the oil and gas sector and the armed forces).

Ensuring pipeline certainty via a transparent CfD auction schedule to give educators, training providers and industry the ability to plan for workforce requirements.

Improving awareness of clean energy careers via high-quality, localised careers advice, to facilitate transitions between sectors in order to empower more people to enter the industry.

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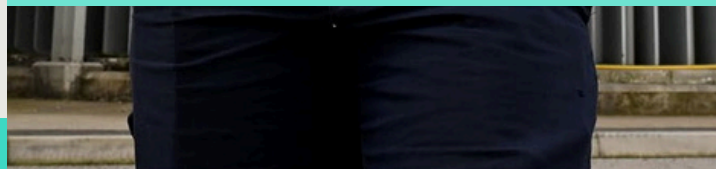

Summary

- Bold, coordinated action is needed to maximise the socio-economic benefits of clean energy, some of which is already in train.

- Focusing on clean energy supply chains where the UK has the greatest competitive advantage will be key. On carbon capture and storage, it's important that the forthcoming Comprehensive Spending Review commits to funding the next phases of projects & stores, and the regulatory framework enables non-pipeline transport to maximise the significant trade opportunity for the UK from carbon shipping.

- Offshore wind is already boosting value and jobs across the UK – evidenced by RWE's Sofia project. The Government should prioritise facilitating investment in the technology subsectors where the UK has the most comparative advantage as set out in the Offshore Wind Industrial Growth Plan report.

- No single project or developer can drive the supply chain investment needed to scale the offshore wind sector. The Government therefore has a particularly valuable role to play in facilitating long-term strategic investment in port infrastructure. We also welcome steps to establish a CfD auction schedule to improve transparency and predictability.

- We strongly welcome the steps being taken to accelerate planning approval of new energy infrastructure and, in particular, the commitment to review resourcing.

- Prioritising the most advanced projects will be critical to meeting the 2030 Clean Power target. We therefore welcome steps by NESO to fast-track grid connections for these projects. In contrast, relaxing the eligibility of the CfD to allow projects at an earlier stage of development without planning consent to bid would risk delivery of the target and have a potentially damaging impact on the supply chain.

- We welcome the establishment of Skills England and the Office of Clean Energy Jobs to take coordinated action to ensure we have a clean energy workforce fit for the future. In reforming the Apprenticeship Levy, we would urge the Government to retain use of post-graduate apprenticeships as an important route to bringing in people mid-career from other sectors.

Further information on RWE in the UK is available on our website:

https://uk.rwe.com/