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Kwarteng pledges CfD4 round clarity

UK Energy Minister Kwasi Kwarteng (*below*) has promised to flesh out details of the next Contracts for Difference



round as soon as possible.

He told GOW2020 delegates on Friday the

tender will open in late 2021 for both established and less established technologies.

"We will publish a formal government response very soon to give the clarity and certainty that the industry and broader investment community requires," he said.

Government is pleased with the level of industry engagement during recent consultations, Kwarteng added. The minister said work is ongoing across Whitehall with the offshore wind industry to ensure the country's 40GW by 2030 capacity target can be met.

"We have invested £4.3m to boost collaboration between government departments to speed up offshore wind deployment while safeguarding our precious marine environment."

He also pointed to the

ongoing grid connection review and work to solve short-term radar impacts with the Ministry of Defence as examples of joined-up thinking in government that will support the sector.

Building a competitive UK-based supply chain is "a key priority", Kwarteng added, citing development of existing clusters in north-east England as a way of reaping the benefits of offshore wind.

"I have been heartened by the reaction to making £160m

available for building port-side infrastructure," he said.

"Building the UK-based supply chain is key for me and government. We will encourage the growth of our world-leading supply chain."

Kwarteng added he hopes the UK's 2050 net zero and offshore wind deployment targets can inspire more countries to commit to the technology when the country hosts next November's

COP26 UN climate conference in Glasgow. Screengrab: reNEWS

South Tees to chase port cash

The South Tees Development Corporation is applying for a slice of the government's £160m fund to help develop South Tees port for work in the offshore wind sector.

Tess Valley Mayor Ben Houchen told GOW2020 the corporation will file an expression of interest before the entry deadline closes today.

"Teesside can play a key role in the sector thanks to its natural geography. South Tees is 12 hours from all wind farms in Europe and the only one we believe with the space to handle both

15MW-plus turbines and floating foundations.

"We... believe we can be ready to support the mobilisation work during the build of upcoming projects in the Dogger Bank."

MHI Vestas business development specialist Mary Thorogood said central funding for port investments can help the UK establish a competitive industrial base.

However, UK Offshore Wind Growth Partnership chair Martin Whitmarsh said port investment alone is not enough to meet sector deal local content targets of 60%.

TRENDING ON reNEWS.BIZ

Scots and UK governments urged to back BiFab

Former UK prime minister Gordon Brown has called on the Scottish and UK governments to work together to agree financial guarantees for fabricator BiFab to cover the supply of foundations to the 450MW Neart na Gaoithe offshore wind farm.

[Click here](#)

SSE sounds out potential Arklow Bank 2 contractors

SSE Renewables is scoping out potential companies to carry out work at the 520MW Arklow Bank 2 wind farm off Ireland. The company has issued two periodic indicative notices of works for turbine installation and associated services, as well as transmission and marine packages.

[Click here](#)

Three US states form offshore alliance

Maryland, North Carolina and Virginia are teaming up to become a hub for the offshore wind industry and have formed the Southeast and Mid-Atlantic Regional Transformative Partnership for Offshore Wind Energy Resources.

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GWO unveils offshore outreach initiative

Global Wind Organisation and the Offshore Safety Professionals Register have agreed a new content and outreach programme to support the safety of workers transitioning to offshore wind.

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Scotland hungry for supply chain pay-off

Scottish Energy Minister Paul Wheelhouse (*pictured*) has warned the offshore wind sector needs to “up its game”



in delivering supply chain jobs in Scotland. He told delegates that awarding jobs overseas risks undermining “the very strong social licence for offshore wind”. The scale of global opportunity should provide a chance for Scotland and the UK to “showcase the skills we have already developed in

construction and maintenance and the opportunities to utilise unrivalled expertise developed by the oil and gas sector”.

Wheelhouse said Holyrood would continue to develop Scotland’s international relationships to ensure the country takes advantage of the global opportunity but it needs industry “to work with us to maximise the mutual benefits of domestic supply chain development”.

He added that the Scottish government’s 75% interim emissions reductions target was

beyond the recommendation of the Committee on Climate Change. A “successful decarbonisation journey would be one which brings all sectors together to maximise the mutual economic opportunities that the transition will bring”.

Wheelhouse meanwhile said Holyrood will do “everything in our powers” to ensure the local supply chain benefits from the sector but some relevant levers sit with UK ministers.

He did not address last week’s decision to decline

financial guarantees for local yard BiFab in connection with a fabrication deal at the 450MW Nearth na Gaoithe wind farm.

Wheelhouse added: “We urgently need clear measures which will... develop meaningful domestic supply chain growth and activity.”

The energy transition will bring a greener and fairer society and offshore wind skills development will play an important part in the process, he said. The minister pointed to the 100,000-plus oil and gas workers in Scotland who

can “provide much of the skills needed”.

Wheelhouse said Holyrood has provided £4m over the last two years for offshore wind innovation, including £2m for floating wind over the past year. He added government used Scottish Renewables Obligation powers, which it no longer has, to support the 50MW Kincardine floating project.

However, a clear and strong development pipeline depends heavily on the UK government’s Contracts for Difference regime. The Scottish administration is lobbying for changes to the system that would allow more spending locally. Screengrab: reNEWS

■ Recruiting workers locally is a “powerful cost reduction” lever for offshore wind developers, according to Paul O’Brien, senior development manager for energy and inward investment for Scotland’s DeepWind supply chain cluster.

Floating wind breakthrough size said to be 300MW-plus

Floating offshore wind projects will need to be in the order of 300MW to 400MW to start driving down the levelised cost of energy.

MHI Vestas floating segment lead developer Pablo Necochea told the RenewableUK event such a scale would lend credibility to the sector. UK government

intervention will be important to deliver a project of that size in leasing rounds after the current Round 4 process, added Mainstream Renewable Power head of offshore Cameron Smith.

Such developments could have the same impact on financiers and investors that UK late-stage Round 2

and early-stage Round 3 fixed-bottom projects had on driving down borrowing costs, he said.

Xodus Group principal consultant Kenneth Couston said electrification of the offshore oil and gas sector provides opportunities for these intermediate-scale projects. “It also allows

for the step up into the supply chain and even the integration of the oil and gas and renewables supply chains.

“Maybe oil and gas electrification is not the end solution but it certainly seems to me to be a key enabler in that acceleration (of floating offshore wind).”

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For a better world of energy



Net zero within reach given right regulation

The UK can achieve its 2050 net zero ambitions ahead of schedule if the right regulatory framework is put in place, GOW2020 has heard.

Iberdrola offshore wind business managing director Jonathan Cole (left) said the ambitious

goal can be unlocked "much quicker than we think".

"But if... we don't convert good words into actions we won't get the consumer on board and this will take a long, long time to implement."

Cole added that political support sounds strong but the regulatory set-up needed to make net zero a reality has yet to be mapped out.

Industry is "eagerly awaiting" the Energy White Paper due later this year to see if it has the answers, he added. "If not then we

are struggling to see how seriously we are taking the net zero vision."

Mainstream Renewable Power global head of corporate affairs Adam Bruce agreed that achieving net zero before 2050 is possible but he cautioned industry must not be distracted by the "latest shiny, new technology".

"We should not be diverted from our central task, which is to double, treble, quadruple the amount of renewable electricity generation that we are supplying."

Bruce added a market design for the flexible electricity and energy system of the next two decades is needed now.

The offshore wind industry also should re-double its efforts to inform the public of the sheer scale of what it is doing. This will give a "greater sense of confidence to reach net zero earlier". Screengrab: renews

■ Collaboration between developers and other stakeholders will be critical if the UK offshore wind industry is to meet the country's 40GW by 2030 target.

There has been more engagement between developers, representative bodies and government agencies but more needs to be done, delegates at GOW2020 heard.

Eversheds partner Paul Maile said: "We need a co-ordinated approach between developers and sectors."

Alicia Green, head of policy at RenewableUK, said it is also important that government agencies are adequately resourced and have the necessary expertise.

"We have been working with Defra to map out the road to 2030. It is not just a case of additional resources, we need the right level of expertise."

Evolution not revolution the way forward for CfD

Any reform of the UK's Contracts for Difference model should be evolutionary rather than a fundamental rethink.

Vattenfall senior originator in the markets business Doreen Abeysundra told GOW2020 delegates she sees the CfD as an "exemplary programme" promoting offshore wind and other renewable energy sources.

"So it is not a fundamental market redesign that is needed but rather a maturing of the structures for off-take and consumption."

One example of this is power purchase agreements, which are an additional instrument to encourage the development of offshore wind.

However, SSE Renewables director of commercial and investment Finlay McCutcheon told the conference there is not a

huge amount of time to determine how the market needs to evolve.

He also noted that operating projects need to be taken into account as well as new builds.

"If we don't ensure that those operating assets achieve their full potential in terms of longevity it will just make net zero harder to achieve," he added.

McCutcheon meanwhile said the solution to price cannibalisation, which will spike later in the decade, includes further electrification creating more demand, direct customer demand through PPAs, and storage and other new technologies.

An evolution of the structure that creates a "competitive market mechanism for operating low-carbon generation to get a price signal that goes beyond the current dispatch signal" is also needed.



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Integrated grid a win-win for the bottom line

Integrated grid connections for wind farms off the UK coast could save up to £5.5bn in capital expenditure and £1bn in operating costs compared with the status quo, GOW2020 has heard.

National Grid project manager Luke Wainwright said the integrated option delivers greatest capex benefits where there is a large volume of wind power to be connected to areas of the onshore network that are already nearing operational limits or when wind farms are located farther from shore.

An integrated approach would also deliver social and environmental benefits, Wainwright added, with an estimated reduction of about 50% in the number of required onshore and offshore cables and landing points.

The majority of the technology needed to deliver an integrated system is available now or will be by 2030, he said.

Derogation pros and cons

The as-yet-untested derogation process could allow projects to be built despite impacts on protected sites, delegates at GOW2020 heard.

However, Eversheds partner Paul Maile warned that going down the derogation path is a lot harder for offshore than onshore wind as compensation for loss of habitat is much harder to determine.

Green hydrogen answer to UK offshore power surplus

The UK has access to a massive source of cheap offshore wind energy that could be an export opportunity for green hydrogen production as well as electricity, GOW2020 has heard.

Orsted head of asset projects and technology Peder Reinewald Hansen (pictured) told the virtual event the potential for offshore wind energy output is far more than the UK will need in terms of domestic electricity demand.

According to ORE Catapult

senior strategy manager David Wallace, there is more than 600GW of generation potential in the country's waters if expected progress with floating technology continues.

This offers a very large resource for green hydrogen, he added.

Siemens Gamesa senior business analyst Henrik Bach Mortensen said offshore wind for green hydrogen needs to take off or else the grid will be overloaded with surplus power.

"Therefore innovations and

how value chains can be set up are urgently needed," he added.

Work needs to be done on tariffs for power-to-X and test projects must be set up faster and approved more quickly, he added.

However, costs need to come down through industrialisation and scale to maximise the decarbonisation potential of green hydrogen, added Orsted's Reinewald Hansen.

"We know this is possible with the right regulatory framework because we have done it for the offshore wind sector," he said.

Orsted has gone through the offshore journey and can use its experience to develop renewable hydrogen, Reinewald Hansen added.

"Today electrolyser production is small and capacity is small. Mass production, larger systems and improved performance will help to reduce capital expenditure and increased efficiency ... all this has been done for offshore wind," he said.

"But the difference with



green hydrogen is on the demand side (and) this needs to be incentivised and developed."

He also warned barriers must be overcome in order to kick-start a green hydrogen industry not just in terms of subsidies.

"One of the barriers around the regulatory regime is how do you connect a generating asset offshore via an OFTO asset in the middle into an electrolyser.

"That's a lot of barriers and costs in terms of transporting electricity," he said. Screengrab: renews

Carbon pricing key to emissions

Carbon pricing is the key to persuading businesses to reduce their emissions, according to Thursday's keynote panel at GOW2020.

Head of Siemens Advanta Consulting Jan Rabe said it is vital carbon pricing is included in any net zero strategy to ensure "a lot of businesses do their job over reducing emissions".

He said: "For me this is the major support we would ask lawmakers to give us."

Global sustainability expert

Peter Schwarzenbauer added: "It has to be simple." The introduction of carbon pricing could show the real cost of some products, particularly food, that is currently considered to be cheap, he added.

Ian Roberts, chief technology officer at food processing business Buhler, said transparency from companies on the impact their activities are having on carbon production will be essential.

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Offshore wind was just starting to come of age in the UK when I had the privilege of taking up the role of RenewableUK chief executive in April 2016 with 5.1GW installed across 25 projects, the largest of which, London Array, had a capacity of 630MW. That year, offshore wind provided 4.8% of the country's electricity.

Expansion of the sector has

RenewableUK chief executive **Hugh McNeal** (right) hails the offshore wind industry's astonishing progress in the country



reaching net zero, helping the UK to make serious progress at last on decarbonising heat and transport.

We are urging the Secretary of State to set out a clear and comprehensive strategy to develop this extraordinarily flexible power source in the upcoming Energy White Paper, expected before the end of this year.

As you may know, I will be stepping down next year. It has been an honour and a privilege to represent the companies that make up this industry, and this has been the most enjoyable work of my entire career.

I am extremely proud of the inspirational work our member companies are doing to transform and modernise the UK's energy system, and am more than grateful for all the support they have given me in the work we have done together so far and I know this will continue to accelerate in the exciting years and decades that lie before us. ■

since proceeded at a pace no one could have predicted or expected. We now have 10.4GW operational with 39 projects in UK waters and we host the largest wind farm in the world, Hornsea 1, at 1.2GW.

And that is just the start. As our latest Offshore Wind Project Intelligence report shows, the UK leads the world with a total project pipeline of 41.3GW, including giants like Dogger Bank at 3.6GW.

We are best value for money, too. Last year's Contracts for Difference auction secured a record amount of new offshore wind capacity at a record low price of £39.65 per megawatt-hour, a reduction of 66% compared to the price of the first CfD auction in 2015.

I am delighted that the Prime Minister fully

appreciates the opportunity this sector offers. His commitment earlier this month to seeing 40GW of capacity installed by 2030 was a watershed moment for the industry, putting offshore wind unequivocally at the centre of the UK's energy transition.

We can meet that target and I am confident that we can even exceed it.

The industrial benefits are enormous. Our domestic supply chain now extends to every part of the UK, particularly benefiting coastal communities that are becoming industrial hubs, places like Grimsby, Hull, Teesside, Lowestoft, Great Yarmouth, the Isle of Wight and Aberdeen.

Offshore wind developers and tier-one supply chain companies are already

engaging closely with local firms, as the Offshore Wind Industry Council's latest publication Collaborating for Growth demonstrates. This is set to intensify as we are determined to maximise the number of UK players joining our supply chain.

The success of offshore wind will set us on course to meet the UK's net zero ambition by 2050.

It is fascinating to consider what our energy mix will look like by then. We know for sure that floating wind will have a huge role to play and that is why we are working with government to put the right framework in place for a massive ramping up of this technology.

Renewable hydrogen generated by offshore wind will also play a vital part in



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THE INTERVIEW reNEWS



Setting the scene at GOW20, senior industry figures talk to reNEWS about vital issues shaping the sector. Today it's the turn of Clark MacFarlane, Siemens Gamesa UK managing director (*left*)

Q What is your view on the attitude and approach of policymakers in Europe to offshore wind and its role in the Covid recovery?

A Covid shone a spotlight on the need for change in many areas of life and society, renewable energy generation being no exception. During the national lockdowns, energy consumption habits changed, demand fluctuated but the long-term goals remain in place across Europe. From this we've seen policymakers identify that where recovery is to happen, it can be shaped in a way to further benefit society and accelerate changes we need to make. In the UK the government summed this up in its aspiration to 'Build Back Better' and to 'Build Back Greener'. The coincidence of net zero demands, generation cost pressures and now the Covid recovery all lead to the logical conclusion that offshore wind is key to more than one of the questions.

Q What are the key challenges to hitting the offshore wind targets being set by the EU and national governments for 2030 and beyond?

A Stable and clear policy is a must in every market. This includes clear pricing policies, a modern grid set-up, the enablers such as seabed,

consent, aviation and environmental matters resolved quickly and consistently aligned with stakeholders, plus the scaling up of operations to satisfy unprecedented demand.

Q What does the sector need from governments to play a key role in the recovery?

A The offshore wind sector needs what it has always needed, certainty and clarity. We have the products, capability and track record to be a critical component of any country's infrastructure with low cost sustainable energy. What we require, is to work with national governments to overcome the barriers and unleash the enablers that make this happen. Delaying auction rounds, limiting deployment levels, always driving the costs lower to limit the return on investments, delaying consents and the timely release of areas to develop will all hinder what the industry is capable of doing.

Q What role can offshore wind realistically play in creating jobs after the pandemic?

A Some industries are hard hit, others need to grow. We have proven that offshore wind generates high value sustainable jobs across countries, many in areas where more traditional

industries have disappeared. If net zero is to be achieved, as it must be, there will need to be exponential growth in the number and scale of wind power projects across the globe. This will take a skilled, dedicated and growing workforce. The question is not can offshore wind create jobs after the pandemic but can the education system satisfy the demand for skilled workers and can we attract those people in other industries that could take our sector forward.

Q What are your thoughts on the supply chain and whether it is equipped to deal with the pace of growth coming?

A While we have had a number of key successes in developing the supply chain, challenges remain. The drive for local content in some markets has developed a stop-start process for some companies due to the volume and timing. We must address this. Many are using international supply chains to remain competitive as a result. The global industry needs to develop global supply chains otherwise we limit its ability to adapt. Balancing the need for global supply chains at lowest cost with the inevitable desire for local content from governments deploying offshore technologies will be a perennial challenge for the industry.

Photo: Siemens Gamesa




RES and Rix Renewables sign new strategic offshore alliance

RES has signed a strategic alliance agreement with Rix Renewables to jointly seek opportunities in the offshore wind market.

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