ATRA ENERGY

Xodus' insights on energy, industry, and innovation

September is always a time of reflection for me as It's the month in which we mark Xodus' birthday – in this case our 19th.

As with all anniversaries, it offers a chance to consider how far we've come, the challenges we've negotiated, and the lessons we've learned along the way, as we look ahead to a bright future.

Floating Wind / September 2024



FOCUS ON FLOATING WIND

Subsea, topsides and flow assurance were our founding disciplines, but we knew early on we needed to consider all aspects of an energy development. Xodus grew quickly, but a turning point for who we would become was when we brought our environment team into the fold in 2007 and with them wave and tidal projects – a move that fired the starting pistol on our renewables journey.

There has been plenty of ups and downs as we have expanded globally and negotiated the peaks and troughs associated with our industry, but this has only served to make us more resilient.

We now have it in writing – GB Energy will be based in Aberdeen and we believe that as a company with its heart in the granite city, years of experience in this basin, and an ongoing commitment to the north-east, Xodus is in a prime position to navigate what is next...

Abrupt changes to energy policy, most notably the energy profits levy, have fuelled uncertainty, and this is having very real consequences for the sector. A lot of hard work is going on to make sure ministers understand what their decisions mean in practice and to recognise the vital role that oil, and particularly gas, have to play in delivering the energy transition.

If we want an energy industry, supply chain and, ultimately, transition that delivers for UK plc, then we need a North Sea that can compete on a global stage. When companies are weighing up where to invest, they look for economic and regulatory stability. Currently, we have neither. Labour's first

budget is now just weeks away and if ministers fail to listen to the concerns of the sector, then we will be left behind, lose our supply chain, and shoot our energy security in the foot.

We still need to understand the remit of GB Energy. The available investment provides a real opportunity to progress key aspects of the energy transition. Offshore wind will be a huge part of this new body's brief, but when an average IGW floating offshore wind farm costs at least £5.5 billion, £8.3 billion will need to be invested cleverly and, if done so, I'm confident it can drive real progress.

Invariably I'm thinking about what the next 19 years will look like for Xodus and for the North Sea. At that stage we will be just a few years away from the UK's 2050 ambition of being a net zero nation, and while I truly believe the future is bright for Xodus, we still need our leaders to work with us to accelerate the progress towards our climate goals



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A LARGE SCALE FUTURE

With around 80% of the world's untapped wind resources in deeper waters, harnessing this power is fundamental if we are to have any shot at meeting net zero. Put simply, large-scale floating wind developments need to happen, or net zero won't. Shallow waters suitable for fixed turbines will inevitably fill up, and there's not enough land to simply build onshore.

By the end of this decade, the UK Government wants to have 5GW of installed floating wind capacity. When you consider it currently represents less than 500MW globally, that's an ambitious target and one that will require the new Labour Government to move the dial quicker. So, where should policymakers direct their focus to have the greatest effect? GB Energy, which describes itself as "a new, publicly owned, clean energy company", has garnered much of the attention since the election.

One area that government would be wise to focus on is the supply chain. Without taking on debt or bringing equity investors on board, it will be difficult for GB Energy at its current budget to be a developer of floating offshore wind projects, but it can be a shareholder while also facilitating investment in the infrastructure that is the bedrock of the sector. England, Scotland and Wales all need to upgrade and expand their port infrastructure to be able to handle the mammoth components that floating wind requires.

There are not enough fabrication yards to be able to cater to all the floating offshore wind projects in the world right now, so countries are going to need to look at how they maximise local content. But as it stands, the UK doesn't have any ports or harbours that can handle floating wind fabrication and turbine installation, or that can be used as marshalling ports for floating foundations. They are under development, but some areas are more advanced than others and the sector is working to a tight timeline

DERISKING FLOATING WIND WITH CFDS

Last month the UK Government unveiled the results of its latest Contracts for Difference (CfD) auction (AR6) which, for the first time, included a commercial scale floating wind farm.

Green Volt, a 400MW development that will initially deliver green energy to decarbonise North Sea oil and gas platforms, is now in a unique position. It is the first floating project that's come through Scotland's Innovation and Targeted Oil and Gas (INTOG) round to secure a CfD.

Although it is always welcome to see a development successfully progressing through the stages, there is a wider issue about the message the UK Government has sent to the market by only rubber stamping one floating wind project.

Smaller, stepping stone projects, like those successful in the innovation part of INTOG or the ones under development in Wales, are vital to establishing a leading floating wind supply chain. Crucially they will go live before most, if not all, of the large-scale commercial projects and offer early work.

Moreover, it would give untold confidence to the investment community to see pockets of floating turbines working as they should. There is a real need to derisk floating offshore wind projects. The risk profile is completely different to that of fixed bottom wind for the very simple reason that the technology is new.

Of the 100 plus floating foundation designs currently on the market only a handful have been tested in the water, and that's before you consider technical risks about things like mooring systems, dynamic cables and turbine integrity. These can be managed through contracting structures, but no single contractor will take on all the potential issues.

Derisking floating wind will require operational projects, and the government missed a trick in not backing the smaller developments to the hilt. Of course, AR6 was constrained by the pot of cash it has available to support floating wind – about £270m for 'emerging technologies', including floating wind and tidal in this instance – but if the Government is serious about hitting its 2030 target, then it's going to have to dig deep. This year over £1.1bn was allocated to fixed bottom wind. Floating wind will need a budget double this, given the projects that will be applying for a CfD between now and 2030.

The future of wind power is no longer tethered to the seabed – it's floating, limitless, and just over the horizon, we just need to align our actions with our objectives

