reNEWS
LIVE @ IPF2023
30 March 2023

reNEWS
Core Media Partner

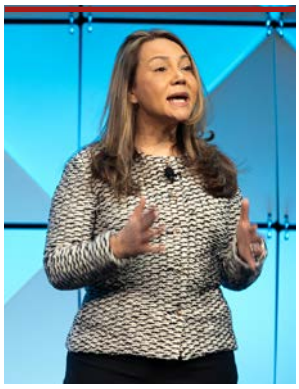
Burdock calls on sector to set sights on 110GW

The US needs to start looking beyond the Biden-Harris Administration's goal of 30GW by the end of the decade and start planning to hit 110GW by 2050, IPF 2023 has heard.

Business Network for Offshore Wind chief executive Liz Burdock told delegates in Baltimore that to be successful in the next 10 years the sector must focus on the larger target set by Washington.

"We have to think big. We need to move beyond this mindset of 30GW and start planning for an industry that we know is going to happen," she said.

"Today, states want 77GW of offshore power and that number is only going to grow when the likes of Maryland, New York and New Jersey chart their net zero paths."



PLAN FOR 2050: BNOW chief executive Liz Burdock
Photo: Business Network for Offshore Wind

She added that while the next 10 years will present some of the biggest challenges facing US offshore wind, they will also provide major rewards.

"We need to start small and start planning big. We need to admit and embrace the necessity for dozens more ports capable of supporting our industry," she said.

"Doesn't that change the urgency to plan, finance and build them?" she asked.

"Just getting one more US market wind turbine installation vessel sometimes seems unsurmountable, but we know we need five – that completely changes the conversation around finance.

"Thinking big and acting big (will) open doors to new policies and practices that will help solve our transmission, supply chain and vessel problems.

Burdock added the network will continue to adapt and expand to support the sector. "We will push for bigger ideas and bigger solutions, and look ahead to the next technologies and opportunities," she said.

Maryland quadruples capacity target

Maryland Governor Wes Moore has set a new state offshore wind target of 8.5GW.

Moore revealed the new goal, up from the previous 2GW, at IPF 2023 on Wednesday. It will take effect once the Bureau of Ocean Energy Management approves new lease areas for the state.

Extra offshore wind capacity will help keep Maryland's economy competitive, he said.

"This target is ambitious, but it is achievable," Moore told delegates in Baltimore.

"It is going to move our state towards energy independence and it is going to help us to meet our goal of achieving 100% clean energy by 2035.

"Maryland is on course to produce around 2.1GW of offshore wind power and create 15,000 jobs through partnerships with US Wind and Orsted," Moore said.

THURSDAY'S HIGHLIGHTS

Fresh water fun
The US Great Lakes offer a substantial resource for offshore wind energy. A panel including Magellan Wind CEO Jim Lanard will explore the technical and socio-economic challenges of possible future development.
0730-0900, Room 321

Bombs away
The threat of unexploded ordnance is a clear and present danger in offshore wind farm development areas. This workshop will focus on UXO risk reduction best practices and will feature contributions from Fugro.
0900-1000, Room 342

Better late than never
A last-minute networking session sponsored by Vineyard Offshore Wind.
1000-1030, L1 Exhibit Hall & L3 Hallway

Made in America
Join a session on US manufacturing and other local supply chain developments. Panelists from Wood Thilsted, North Shore Steel and US Wind will explore requirements for certification and verification of innovations.
1030-1130, Room 347

Balancing act
Continually developing the next generation of wind turbines makes it difficult to achieve cost reductions through economies of scale and standardised production. Panelists will share perspectives on the trade-offs between continued upsizing and industrialisation.
1300-1400, Room 347

Reforms need to find permitting sweet spot

Permitting reforms need to balance speed with flexibility to deliver the most benefits to the US offshore wind sector.

Shell vice-president for offshore wind power Americas Amanda Dasch *(pictured)* told IPF 2023 in Baltimore on Wednesday that the country will not hit its 30GW by 2030 target if planning is not sorted.

She highlighted the importance of shortening the permitting process to reduce the time taken to deliver crucial offshore wind projects.

"One issue is that we have to indicate what our project design envelopes are to look like, and the permitting process will be faster if these envelopes are smaller.

"However, smaller project design envelopes give us much less flexibility as a developer to bring in the best technology, the things that will facilitate that development to be the most efficient that we can deliver," she added.

"It also forces us to rely on the European and Asian supply chains, because we can clearly outline in the envelope what those technologies look like.

"We need to create some flexibility in project design envelopes so that we can promote new technologies to be developed locally.

"We cannot promote the development of the US supply chain if we are forced to maintain small project design envelopes, but we also cannot move our permitting process as quickly as I want to if I have a large project design envelope.

"If we do not solve the permitting challenges, we will not make the 30GW by 2030. If we get together to do that, we have a really good chance to make a lot of progress towards that goal and then go on and work towards the 110GW," Dasch said.

Reskill US workers to deliver offshore wind growth spurt

Helping workers to reskill will provide a ready-made workforce to fill the growing number of jobs as US offshore wind is facing a major skills shortage, IPF 2023 has heard.

A National Renewable Energy Laboratory (NREL) report has estimated that the US offshore wind workforce will go from around 1000 workers currently to between 15,000 and 58,000 full-time jobs per year on average between 2024 and 2030, depending on the amount of US content used.

US Department of Energy offshore wind lead Jocelyn Brown-Saracino told the Offshore Wind Workforce Summit at IPF that the administration is "ramping up for significant offshore wind workforce growth".

Utility Workers Union of America Local 1-2 president James Shillito told delegates the industry needs to realise that there are skilled workers out there already.

Well-developed offshore energy sectors, especially in the Gulf of Mexico, provide a ready-made source of skilled workers. Manufacturers and construction workers can all be retrained to meet the needs of the offshore wind sector, experts said

RPS senior environmental specialist Kathryn Roy said: "Diversification is also very important in this training in order to make sure we have skills for the entire life cycle of an offshore wind project."

Principle Power and Aker among FLOWIN winners

Backing from the NREL's American-Made FLoating Offshore Wind ReadINess (FLOWIN) scheme will spur supply chain engagement, said Principle Power chief commercial officer Aaron Smith.

The foundation designer and its partner Aker Solutions were yesterday named one of nine winners of the first phase of funding in the process.

"The FLOWIN Prize motivates people to engage with the supply chain, think about ports and infrastructure, how you can leverage the best of existing capabilities – but also be realistic about the new investments and capabilities you are going to need to build off of these projects," Smith told reNEWS at IPF 2023.

Daymark and Xodus pool consultancy skills

Energy consultancy Xodus has signed a memorandum of understanding with US counterpart Daymark Energy Advisors to collaborate in the North American offshore wind industry.

The companies said they will leverage expertise to drive innovation. They will also collaborate to efficiently answer key questions from developers and state agencies as activity ramps up.

In combining strengths and expertise, the 'surf-and-turf' offering will carve out a leadership presence in the offshore wind consulting market by providing an end-to-end understanding of the delivery of electricity from an offshore wind turbine through to the ratepayer, they said.

Xodus managing director Stephen Swindell said: "Both parties bring different – but complementary – knowledge and skill-sets to the energy market and infrastructure project consultancy."

■ Experts from both Xodus and Daymark will be on hand at IPF at Booth 719 in the Exhibition Hall. In addition, Xodus US vice-president for renewables Hillary Bright will be speaking at the 'Regional Update Breakfast - Gulf of Maine: Floating Offshore Wind Supply Chain Perspectives' panel today at 0730 in Room 324.

Offshore wind crucial to US clean energy agenda

US Secretary of the Interior Deb Haaland has hailed the role the US offshore wind industry can play in protecting the global climate during her special session at IPF 2023.

"The key to making our clean energy agenda a reality is a thriving offshore wind industry," she told delegates in Baltimore on Wednesday.

Haaland noted how taking a collaborative approach is an essential part of meeting the sector's potential to combat climate change. "Whether you are an industry leader, a union member, a tribal member, a political leader or an ocean user, your contributions advance our shared and ambitious goals to meet the climate crisis head on," she said.

"The work we do is not just about us. It is about building a future where kids do not have to worry if their favourite animal is going to go extinct, where families can live without fear of facing extreme wildfires and weather events, and where communities can continue their traditional ways of life without catastrophic climate events forcing them to relocate."

BUILDING A FUTURE: US Secretary of the Interior Deb Haaland at IPF 2023 Photo: Business Network for Offshore Wind

Haaland told the sector it can play a crucial role in tackling the intersecting challenges we face right now.

She added: "This collaborative, inclusive community-driven approach to advancing our country's offshore wind industry is one of the many reasons I am so proud to be part of this administration."

■ The Maryland Energy Administration (MEA) has awarded the Business Network for Offshore Wind $1.25m to develop and implement an Offshore Wind Experience Hub on the Eastern Shore of Maryland.

The project will target schools and colleges to address the public's lack of awareness and education about offshore wind.

"With partners like the BNOW we can further educate and showcase the benefits of the offshore wind market," said MEA director Paul Pinsky.

Spotlight on standardisation

Standardisation of key wind farm equipment will come under the spotlight on Thursday at IPF 2023.

Aker Solutions vice-president of business development Jason Folsom will explore how to balance standardisation in the offshore wind sector while ensuring it remains efficient, innovative, competitive, and cost-driven.

The industry will have to overcome headwinds to create the supply chains needed to ensure turbines can be developed affordably and at scale, he said.

Folsom will moderate the 'Is Bigger Always Better? Tradeoffs Between Upsizing and Industrialisation' session at 1300 in Room 347 on Thursday.

Representatives from the National Renewable Energy Laboratory (NREL), GE, Vestas and Invenergy will explore how the industry can balance innovation, economies of scale, and production to achieve optimal cost and operating efficiency.

US primed to mirror UK growth

The US sector is to follow in the footsteps of UK industry growth, IPF 2023 will hear on Thursday.

Data from RenewableUK predicts steep upswings in both markets from 2024 onwards.

The UK trade body will share insights from its EnergyPulse market intelligence platform in its UK Market Update on the Global Markets Insights Stage today, and explore how the US offshore wind sector can learn from its own experience.

"The UK's offshore wind market is mature and offers numerous opportunities for US and global companies to get involved in the UK marketplace," said data and content manager Grete Domarkaite, who will be presenting at the UK Pavilion on Stand 732 in the Exhibition Hall.

kent

25+

offshore substations engineered globally

32GW

of offshore wind projects delivered globally

3500+

wind turbine generator foundations designed and maintained

30+

floating wind projects designed and engineered

Global Offshore Wind

Your trusted partner towards a sustainable future

45+ years' experience

Canada | United Kingdom | United States of America : Boston | Houston

kentplc.com

THE INTERVIEW reNEWS

Setting the scene for IPF 2023, senior industry figures talk to reNEWS about vital issues shaping the sector. Today it is the turn of Orsted Americas CEO **David Hardy** *(left)*

Q What is your main message this week at IPF 2023?

A The American offshore wind industry is happening now. As we speak, our South Fork Wind project is under construction, with work to install the first American-made export cable in US waters off Long Island. By the end of the year, South Fork Wind will be delivering power to Long Island. Americans across the country are already hard at work supporting the offshore wind supply chain. Years of designing and planning is finally coming to fruition.

Q How concerned are you that global cost pressures may slow the expansion of US offshore wind, given the warnings from several developers?

A The offshore wind sector, like many other industries, is certainly facing unprecedented macroeconomic headwinds and at a critical moment for the industry. Success of these early projects will not only be key to achieving scale and developing the domestic supply chain, but also to making necessary progress towards state and federal climate targets. We all have a vested social, environmental and economic interest in seeing these early projects succeed.

Q How is Orsted dealing with cost pressures on its pipeline of near-term projects, and will it result in delays or cancellations of farms?

A We are proud that South Fork Wind is on schedule to be fully operational this year, and that our other projects are continuing to advance through the permitting process. We recently announced that Sunrise Wind has been particularly impacted by these macroeconomic trends and project-specific challenges, including cost increases driven by installation services and vessels. But we remain committed to our projects and recently submitted bids for new ones in New York and Rhode Island, so we are confident in our ability to deliver projects and expand our pipeline.

Q How has the Inflation Reduction Act changed things for US offshore wind developers?

A The Inflation Reduction Act represents a historic commitment to accelerating clean energy in the US and has proven critical in bringing much-needed certainty to the development process. We need the US Department of Treasury to implement this law in a way that unlocks the maximum amount of its potential. The policy goals of the IRA are clear – deploy more clean energy, while building a domestic supply chain and improving local communities. The sector is looking to the Administration to move forward quickly with guidance that recognises the challenges of establishing a new industry. This includes the need to invest in standing up an American supply chain and gives us the certainty we need to keep making long-term investments in American jobs and manufacturing.

Q What is your high-level view of where things are now with US offshore wind, and will the industry deliver 30GW by 2030?

A While we might be facing some headwinds, we have some tailwinds too. Offshore wind energy is a national priority, and the Biden Administration is committed to accelerating its deployment to meet our national energy goals. Our supply chain is already creating thousands of jobs across the country and generating billions of dollars in economic activity in almost every state in America. And, later this year, the first commercial scale projects will begin delivering power to the grid. With the right investments and the right policies, I believe the US will not only be a major producer of offshore wind but an exporter of expertise and technology to other markets. We need more clean energy now, so the most important thing is that we make as much progress towards the 30GW goal as possible. The future of our planet depends on it.

Vessel issues spur contract plan pivot

Shortage of ships and increased costs challenge US developers, says Clarksons Offshore & Renewables T&I manager **Olivier Candeel**

Construction on the first large-scale US offshore wind project is scheduled to begin in the next couple of weeks, and with the start of the foundation installation of Vineyard Wind just around the corner the market looks set to further establish its position on the global stage.

However, when looking at the technical vessel and port set-up required to achieve these ambitions, there still seems to be a long way to go.

We have identified major supply and demand gaps in the US project pipeline up to 2030, showing a clear and specific need for vessels and infrastructure to support transport and installation.

Increased costs are among the challenges facing the US market. Building and operating vessels in the US comes with a cost disadvantage of between 60% to 120% when compared to Europe and APAC. That is on top of recent global price increases in labor, materials, and yards.

This underscores a dearth of newbuild investment.

Today's lack of fit-for-purpose Jones Act vessels is both a challenge and a risk, and needs to be managed during the tender or pre-construction phase years, long before the actual project start date.

Meanwhile, whether looking at new vessels, crews, or owners, there is relatively less offshore wind experience in the US given the stage of market development.

Despite MARAD supporting the US maritime sector with very favorable investment support, this has prompted little investment. US capital markets need to be schooled more in-depth on the opportunities within the sector.

Uncertain project start dates are adding yet more complexity to the push for a final investment decision. The combination of US and non-US contractors, together with the global offshore wind construction competition, does not make it easy to lock in a firm tender budget either.

Given the challenges outlined above, we have recently seen more US project developers proactively pursuing a multi-contracting route for the construction of offshore wind farms.

This strategy has been driven by a desire for better visibility on both risk and costs than that offered by the more traditional option of single sourcing engineering, procurement, construction and installation (EPCI), which results in paying a premium for others to take on most of a project's risk.

While this multi-contracting approach has indeed delivered on its promise of better cost control and improved visibility of US local content, interfaces and the different installation packages, it brings its own set of complications.

The management of the interfaces and associated risks creates a need to either insure or subcontract the various risks and packages to different parties.

In turn, managing multiple contractors requires a substantial team of experienced people who are fully focused on the commercial and programme management of the interfaces, as well as the delivery of each scope.

Assembling a team capable of executing projects of this size will undoubtedly come with challenges. This has never been truer than in the post-Covid-19 era where many nations have substantial plans for large infrastructure developments.

Coupled with the re-emergence of oil and gas, as well as the sharp rise in the global adoption of offshore wind, this means that experienced professionals are thin on the ground and the recruitment market is highly competitive.

The issues described above are not new to us and are a common way of contracting in more mature markets such as Europe. However, it remains a number one challenge to identify risk and trade-off with interfaces and cost, an exercise not to be taken lightly and one to start in combination with front-end engineering design studies. ■

Thursday Highlights

Regional Update Breakfast – Gulf of Mexico: Uniquely Positioned for Offshore Wind Success

Increasing interest in the Gulf of Mexico's status as next-in-line for US offshore wind development is not a surprise. The Gulf is uniquely poised, with existing infrastructure, decades of offshore processes from oil and gas, strong climate plan commitments from states like Louisiana, significant regional supply chains, one of the most expansive ports and logistics networks, and pioneering environmental and deconfliction modelling. This panel will discuss GoM advantages including supply chain and infrastructure, research and academic partnerships, innovations to de-risk and optimise development in the region, and insights from developers evaluating opportunities.

0730-0900, Room 323

Regional Approaches to Unlocking Transmission Constraints

The lack of an offshore transmission 'backbone' that can transfer power to onshore population centres is a growing area of concern for developers. While transmission issues are not new in the energy industry, the existence of imminent offshore wind power at ever-increasing targeted gigawatt levels creates the need for a new system to harness its potential. This workshop will focus on regional approaches to transmission and cost sharing as a solution to building a robust system.

0900-1000, Room 341

What's New & Spinning: Project Updates

Join the world's leading offshore wind developers as they share an overview of their current projects and what is coming down the pipeline. With development timelines ranging from five to 10 years, it is critical for businesses to take advantage of opportunities in the supply chain now. What schemes are looming on the East Coast? What developments are happening on the West and Gulf Coasts? What are the latest floating technology updates? Business Network staff will lead a moderated Q&A session for participants directly following developer presentations.

Featuring: Community Offshore Wind, Equinor, Ocean Winds, Vineyard Wind

1000-1100 & 1400-1500, L4 Ballroom 3+4

Engaging West Coast Fisheries Stakeholders to Ensure Floating Offshore Wind Success

One of the main obstacles facing the West Coast floating offshore wind industry (FOSW) is the potential exclusion of fisheries stakeholders from the development process. This workshop will cover industry interaction with West Coast fisheries to date, review lessons learned from the East Coast, and possible out-of-the-box solutions. There is an urgent need for developers, the Pacific Fishery Management Council and the National Marine Fisheries Service to engage in dialogue to determine two key issues: an inter-array cable depth that minimizes major fisheries interactions and scientific survey adaptations that will allow data to influence fishing quotas and coexist with FOSW.

1030-1130, Room 343

Women in Wind Energy Luncheon

With its potential to supply clean, utility-scale energy and substantial economic benefit to local communities, offshore wind has broad public support. Its successful emergence as a major industry in recent years, however, has brought forward significant challenges to navigate on all levels – from sea mammal concerns to questions about community engagement and economic benefit. As a maturing industry, offshore wind must navigate global supply constraints, economic variability, and its place in the public sphere, while fighting off disinformation and politically-convenient attacks. Our panel will discuss what is ahead for offshore wind and how industry can adapt to changing economic pressures and public perceptions that naturally come with more success.

1130-1300, L4 Ballroom 3+4

Floating Wind – US Site Conditions and How the Industry is Solving Them

The workshop will focus on upcoming floating wind projects in US waters. Among others, water depth, met-ocean and geo conditions are key challenges for developing floating wind along the West Coast. In the Gulf region the low/complex wind conditions will be a major issue to address to enable successful build-outs. Panellists will present solutions to these topics in a brief presentation followed by a moderated panel discussion.

1300-1400, Room 346

Building a Supply Chain in the US

A resilient domestic supply chain is critical in achieving the national offshore wind energy target of 30GW by 2030. However, the US offshore wind supply chain is in the nascent stages of development and will require investment and time to enable it to support the industry. Panellists, representing projects at different stages of development, will discuss the challenges and opportunities in developing a domestic supply chain for the offshore wind industry in the US. They will look at lessons learned from their individual projects and provide insights on potential next steps from their point of view. The session will also include an opportunity for the audience to discuss actual issues they are facing in developing a supply chain, and potential solutions.

1415-1515, Room 347

Closing Time "Laissez Les Bons Temps Rouler" Reception

1530-1700, L3 Camden Lobby

reNEWS

Publisher **Renews Limited**
International House
International Business Park
George Curl Way
Southampton SO18 2RZ

ISSN 1478-307X

editorial@reNEWS.biz
reNEWS.biz