



Everyone's talking about energy transition

In just over five years, renewable energy targets set for 2030 will come knocking on the door. Whether they will be reached, missed, or overshoot depends on multiple factors, most of which concern policymakers and the energy sector itself.



At the end of 2023, the EU increased the binding renewable energy target for 2030 to 42.5%, encouraging countries to aim for 45%. The US has a goal of 80% of renewable energy generation by 2030. China, which is still predominantly powered by fossil fuels, has ramped up renewable energy construction and reported reaching its 1,200 GW wind and solar energy target for 2030 six years earlier, in July 2024.

Offshore energy

In the offshore arena, wind leads the way to renewable energy and has grown into a mammoth industry, given its potential to install large generation capacity far away from land.

Since floating wind technology can be deployed further offshore, this segment of

the offshore wind industry is also gaining momentum. With a few projects involving decarbonization of offshore oil and gas assets already underway and its off-grid potential, there are more than a couple of routes to market for floating wind.

'Floating wind turbines offer more options to solve the puzzle of achieving a fast energy transition in the coming years,' said Axelle Viré, Professor of Floating Wind Energy and Head of Department at TU Delft. Viré will be one of the panelists of the Floating Wind conference session at the upcoming Offshore Energy Exhibition & Conference (OEEC) in Amsterdam.

The number of wave and tidal energy projects is also increasing, albeit at a pace slower than with the already established wind energy technology. Floating solar is also entering the

scene, most notably as an addition to offshore wind farms, so the marine energy industry is now buzzing with activity.

Renewables are also playing an increasingly significant role in the production of hydrogen and clean fuels, creating an unbreakable link between multiple industries, some of which have previously been concentrated within their domains.

The global quest to achieve the goals set under the Paris Agreement is joined by carbon capture and storage (CCS) and decarbonization technologies throughout the supply chains and the wider economy.

Still, some hurdles remain, especially in moving new projects to deployment faster and building them with the existing supply chains.



Moving parts

On the policy-making side, several governments around the world are working on setting up systems to better support new technologies in the energy sector and streamline permitting to accelerate project buildout. New rules are also being introduced in tenders to not only include but also enhance nature through project design.

Initiatives on new policies and regulations to speed up the deployment of offshore wind farms, and other renewable energy and clean fuel projects, have been spurred by both national clean energy ambitions and the industry itself as it often faced slow and cumbersome permitting systems.

In offshore wind, the supply chain is also one of the challenging areas as it is expected to become more strained as both the number of projects and the sizes of wind turbines continue to grow. With floating wind joining the stage, especially with options for in-port maintenance, existing vessels, and ports serving the industry are anticipated to soon become stretched to their full capacities.

The industry and governments are starting to join forces in this area as well to ensure reaching national renewable energy objectives. With ports in particular, the collaborative approach crosses country borders and spans several sectors.

Working in harmony

'Port logistics is an important part of the equation to reduce the LCoE. We will take

responsibility, and we recognize that this is not possible without cross-border collaboration,' said Tommy Sandtorv, Chief Commercial Officer at Norway's Karmsund Port Authority, also a panelist of the Floating wind conference session at the upcoming OEEC 2024 event.

The session will also host Richard den Hollander, Global Business Development and Account Management Director at Seaway7, and James Young, Chief Strategy and Compliance Officer at JDR Cable Systems, who will provide insight into the industry from the perspectives of an offshore construction specialist and a subsea power cable supplier.

'As we move towards a future powered by renewable energy, every offshore wind farm, offshore substation, and cable becomes a critical piece of the larger energy puzzle. These aren't just single projects, they are part of an increasingly interconnected offshore grid,' said Saskia Jaarsma, Head of Offshore Development – Large Projects Offshore at TenneT.

Saskia Jaarsma is joining OEEC 2024 as a panelist of the Grids & Interconnectors session which will also host speakers from the Netherlands Enterprise Agency (RVO), TNO, and RWE.

Floating wind and transmission systems are just two of the many topics that will be the focus of this year's Offshore Energy Exhibition & Conference (OEEC).

This year's event there is Harmony and throughout the exhibition floor, the conference, and other parts of the event program, OEEC aims to showcase the increasing collaboration between the industries and their verticals and spur stronger ties between multiple players across the sector.

New tender designs and requirements will be the focal point of the Innovations for tenders panel and the supply chain will also have its own dedicated session, as will CCS.

'Carbon capture and storage (CCS) is vital to the UK reaching net zero by 2050. The NSTA has a significant role to play in realizing the UK's CCS potential,' said Alistair Macfarlane, Manager UK Carbon Transportation and Storage at the North Sea Transition Authority (NSTA) and one of the panelists at the CCS conference session at this year's OEEC.

More knowledge sharing and opportunities to catch up with developments in the offshore energy sector will be available at The Stage, with David Molenaar, former CEO at Siemens Gamesa Renewable Energy BV, and Manon van Beek, CEO at TenneT, among the speakers.

The Offshore Energy Exhibition & Conference is held in Amsterdam, at the RAI Amsterdam convention center, where all the industries of the offshore energy sector come together once a year to meet. OEEC 2024 will be held November 26th and 27th.

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