The floating wind ambition gap: now or never

Global floating wind set to miss 2030 targets, but new report says it’s not too late

The world’s largest floating offshore windfarm to date, Equinor’s 88MW Hywind Tampen (Norway), started to produce power in late November. However, slow policy and regulatory processes continue to delay the growth of this large-scale renewable energy technology.

The gap between ambition and action must be closed.

These are the findings of the latest report by leading offshore wind market analysts, 4C Offshore, whose study indicates that though the near-term goals of floating offshore wind are struggling to be met, they may not yet be out of reach.

November’s Floating Wind Progress Update indicates that targets for 2030 wind production from floating (rather than fixed) windfarms are set to be missed across the globe. Interestingly, rather than being a supply issue, the report notes that lack of progress is often down to administrative delays, with governments failing to follow up...
remain high, but progress is too slow. Governments must shift their focus from the 2030 - 2040 time horizon to the here and now. 2023 must be a year of decision-making and action if commercial-scale projects are to hit the water this decade.”

**Comprehensive assessment**

4C Offshore’s bi-annual report offers a comprehensive assessment based, among other things, on the world’s most complete offshore wind project database with concise yet detailed country-by-country top-down (policy) and bottom-up (project-level) analysis of the floating offshore wind market. Information includes forthcoming lease and offtake auctions for several markets, a reference guide to the progress of competing floating foundation technologies, and an overview of installation practices to date and O&M methods for the future.

Although countries like Japan, Norway, Portugal, and the UK were first out of the blocks, the US and Korea appear to carry the greatest momentum. Both are expected to produce around 10GW of energy from floating wind capacity by 2035, representing nearly half of the world’s total. China is also expected to commercialise quickly, with the first GW-scale project being commissioned before 2030.

But aside from fulfilling global climate ambitions, Aukland explains why this lack of progress is significant: “Cost reduction is heavily dependent on economies of scale, and continued innovations are needed to bring costs into parity with fixed-bottom. Therefore, the sooner we start installing large-scale floating windfarms, the sooner the world can benefit from their increased environmental benefits.”

**TGS / 4C Offshore**

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**Expectations**

Since the previous report from mid-2022, estimates for 2030 installed capacity have been revised down by 2GW. Globally, there is now expected to be 14GW and 46GW of floating offshore wind in operation or under construction in 2030 and 2035, respectively. This represents around 5% of the global offshore wind market, which is dominated by bottom-fixed installations.

“The decrease in our estimates reflects continued policy-side delays and slow authorisation processes in multiple countries,” explains Ivar Slengesol, Vice President of New Energy Solutions at TGS, 4C Offshore’s parent company. “Despite high ambitions from developers, with several companies having floating project pipelines greater than 10GW, project development is too slow. We predict development will not move fast enough without proper government support.”

**Key message**

But a key message from the report is that, although the current trajectory is pointing in the wrong direction, there is still time to regain some lost ground. With the potential for floating wind installation to begin within seven years of site award, we are now entering a crucial window of opportunity.

Richard Aukland, Director of Research at 4C Offshore, notes a parallel between the more-mature side of the wind industry: “We saw this with the fixed-bottom market a decade ago. Ambitions for floating wind deployment are rapidly increasing globally as governments become attuned to floating versus fixed-bottom wind benefits. Aside from the issues of limited geographical suitability for fixed wind turbine installation, floating windfarms can be less visible from the shore, carry fewer environmental impacts, and access stronger wind resources. Competition and expectations