

Japanese floating wind on course for market, ClassNK/Recharge event told

By Brian Publicover in Hamburg
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Progress on Japan's flagship floating wind project, as well as new state-backed plans to experiment with a range of floating offshore structures is underscoring how the nascent industry is rapidly moving closer to commercialisation, according to a panel of leading sector



Fukushima Forward is the pioneer of Japan's floating wind efforts

Fukushima Forward

“We’re now moving into the next phase to industrialise this,” says Akihiro Suzuki, president of the Wind Energy Institute of Tokyo (WEIT), which conducts wind resource assessments and load analysis for floating turbines.

This summer, a consortium backed by the Ministry of Economy, Trade and Industry switched on a Hitachi 5MW downwind turbine mounted on an advanced spar floater as part of the 14MW Fukushima Forward demonstrator.

Nonetheless, a number of recent developments suggest that central and regional governments in Japan are ramping up support for both floating and fixed-bottom technologies.

In January, the New Energy and Industrial Technology Development Organisation (Nedo) — a central government R&D body — unveiled plans to back the development of 270MW of offshore wind up to April 2018.

In February, the authorities in Nagasaki prefecture — in cooperation with WEIT and the UK Carbon Trust — announced plans to set up a tidal and floating wind energy test facility by 2018.

In May, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) introduced legislative amendments that have opened up the nation's ports for near-shore wind development.

And in July, France's Ideol and Hitachi Zosen announced plans to build a 7.4MW, two-unit pilot project off the coast of the southwestern island of Kyushu, using a two-bladed 3MW turbine and a three-bladed 4.4MW machine, paired with a number of mooring technologies and foundations.

This focus on different technologies is central to Nedo's plans to continue to experiment with a range of floating structures, including spars and semi-submersible and tension-leg platforms.

"We also want to consider shallower depths, to prove that floating can compete with fixed-bottom structures," says Takeshi Ishihara, a senior member of the Fukushima Forward team and one of Japan's leading proponents of floating offshore wind.

"Japan is now the most advanced country for floating wind turbines," says Sadao Akahoshi, deputy general manager of renewable energy at Japanese certification outfit ClassNK. "We'd like to use our experience to encourage R&D in foreign countries." Speaking at the ClassNK/Recharge event,

WindFloat 1 designer Principle Power chief executive Joao Metelo argued that floating wind technologies have already been shown to be cost-competitive with existing fixed-bottom solutions. "We're starting to have to convince people that this is not just a technical playground and prototype play, but that we can actually deploy commercially at large scale," he said.