

Full speed ahead: Schmidbauer supports the construction of an Offshore Floating Wind Farm in France

Schmidbauer was commissioned a project in France to handle the heavy load logistics of three prototype floating wind turbines for an Offshore Wind Farm that is being built off the Mediterranean coast near Marseille in 2022.

France, January 2021. The view of wind turbines near or on-shore have become a familiar sight. In order to reach the strongest winds out on sea in new locations, companies have been coming up with a new innovative way to produce wind energy. By developing floating turbines that can be installed in deep waters out of view from the coast, companies are opening completely new possibilities.

A new technology secures the energy of the future

The floating approach allows turbines to be installed in much deeper waters up to 800 m deep to catch the strongest and most consistent wind - and makes it almost invisible from the coast. The world's first floating wind farm emerged with 5 turbines about 15 miles from Peterhead in Aberdeenshire off Scotland and started delivering electricity to the Scottish grid since 2017.

As large maritime waters open floating arrays, experts expect floating wind power to be an enormous potential and core technology for reaching climate goals. The new technologies of floating turbines that can be installed out of sight from the coasts are being developed and tested around the world. France set a goal to become world leader in the technology and committed to projects of Brittany and the Mediterranean Sea. Spain and Japan are moving forward strongly in the market. The technology opens also new possibilities for the US where suitable offshore locations exist mostly with water depth greater than 200 m.

The acquired knowledge of conventional wind turbines over the past 10 years gives the floating turbine an incredible boost as well as the mechanic principles that oil and gas industries have used for decades for their off-shore sites. Already, floating turbines are generating almost twice as much electricity as near shore wind turbines, and three times as much as onshore turbines.

The project: Provence Grand Large

Since 2010, EDF Renouvelables has been interested in the potential of floating wind power and is developing a pilot project off Port-Saint-Louis-du-Rhône: the Provence Grand Large project.

The project is based on Siemens-Gamesa for the supply and maintenance of the three 8.4 MW wind turbines and on SBM Offshore for the design, manufacture, and installation of the floats.

The three wind turbines will be installed in the so-called Faraman area, 17 km from Napoléon beach in the town of Port-Saint-Louis-du-Rhône. The project will then be connected to the public electricity transmission grid via a 19 km submarine cable and a 9 km underground cable by RTE.

Since December 2019 Schmidbauer has developed a concept for the installation of the 3 floating wind turbines as well as the handling of the components in the harbor before the turbines are brought out to

sea. The Schmidbauer engineering team has been closely working with Siemens Gamesa and will provide the equipment for the harbor logistics in Spring of 2022.

The company provides a LR 11350 crawler crane, a CC 2400-1 crawler crane, 130-t auxiliary cranes, and 48-axels SPMT.

“It’s a very constructive experience to be involved in the project from an early stage on, and it has been critical in the planning of many details for our client. As the development of this prototype is taking its course, the engineering teams involved have already been working together closely. We are happy to be able to support this innovation with our experience and expertise, and look forward to its realization.”, says Minka St. James, Contract Manager from Schmidbauer.



Source: <https://e360.yale.edu/features/will-floating-turbines-usher-in-a-new-wave-of-offshore-wind>