

PRESS RELEASE

The construction of France's first offshore wind turbine is officially underway

Floatgen is the first wind turbine to be installed off the French coast. Equipped with a floating foundation designed by the French expert, Ideol, and built by Bouygues Travaux Publics in Saint-Nazaire Port, it will be installed on the Centrale Nantes offshore test site, SEM-REV, off the coast from Le Croisic. The construction was officially launched today at a ceremony organised on the side-lines of the annual Renewable Marine Energies conference.

Biarritz, 1st June 2016 – There are over 3000 offshore wind turbines around the world – the overwhelming majority of which are “fixed” i.e. attached to the seabed, but none as yet in France.

Backed by a European consortium of seven companies and research bodies, Floatgen is leading the way with several firsts. The first offshore wind turbine in France – the blades of this 2MW turbine are set to rotate for the first time in 2017, much earlier than for a fixed turbine – but, also the first full-scale demonstrator of the ring-shaped floating foundation developed and patented by Ideol.

The aim of this project is show the tremendous commercial potential of offshore floating wind turbines. They will produce electricity from a renewable source at a significant distance from the coast, thus preserving the visual integrity of the coastline, at a reduced cost thanks to the stronger winds further offshore.

It will also underscore the industrial potential of this new sector which will lead to job creation on both a local level near the installation sites, where concrete is the main foundation construction material, as well as with the main suppliers, as illustrated by the contract signed with Le Béon for the supply of the anchoring system.

The construction was thus officially launched at a contract-signing ceremony attended by Ideol, Centrale Nantes and Bouygues Travaux Publics. For Ideol's CEO, Paul de la Guérivière, *“Floatgen is an essential step for the company culminating in the offshore launch of the first unit of our technology, but it's also a key moment for France and Europe which have the opportunity to become world leaders in this emerging market”*.

According to Arnaud Poitou, Centrale Nantes director, *“Floatgen is a milestone in the school's history. SEM-REV, our offshore test site, a visionary project back in 2007, is today proving itself as a vital tool in the development of a new industrial sector in France.”*



From left to right: Nicolas Jestin, Section head – Commercial – Energy at Bouygues Travaux Publics ; Paul de la Guérivière, Ideol's CEO, Arnaud Poitou, Centrale Nantes director ; Clément Mochet, Sales&Marketing Officer of Le Beon

For Benoit LANGE, Commercial Director of Bouygues Travaux Publics, “Our involvement in the Floatgen project demonstrates the company’s willingness to apply its large track record in marine infrastructures delivery, in France and abroad, to the Marine Renewables Energy. Concrete floater construction, when implemented at an industrial scale, will be a competitive solution for offshore wind in the coming years.”

Construction will get off the ground in September in Saint-Nazaire Port, where Bouygues Travaux Publics will build the floating foundation, mobilising 80 workers on site. At the conclusion of the six-month construction phase, the wind turbine will be fixed into position, quayside, on its foundation. The whole assembly will be subsequently towed out from the Le Croisic coast to the installation site, SEM-REV, the world’s first multi-technology offshore test site connected to the grid, owned by Centrale Nantes and run jointly with the National Center for Scientific Research. Once on site, the wind turbine will be connected to the anchoring system and the electricity export cable.

Floatgen, a project with backing from seven European partners

The project began in 2013 bringing together seven partners each with a specific role to play:

Ideol: design and provision of the entire floating system (foundation, anchoring system and electricity export cable) as well as the wind turbine; **Centrale Nantes**: ocean engineering expertise and access to its offshore test site; **Bouygues Travaux Publics**: floating foundation construction; **the University of Stuttgart**: participation in the study phase simulations, **RSK GROUP**: environmental impact analysis; **ZABALA** project management; and finally, **FRAUNHOFER-IWES**: comparative analysis of the different floating solutions.

It is supported by the European Union as part of the FP7 programme, by the French Environment and Energy Management Agency as part of the national Investments for the Future Programme, and by the Pays de la Loire region. This project is a precursor to the installation in coming years of first pilot, then commercial, offshore wind farms. More information on www.floatgen.eu



Ideol, based in La Ciotat (France), was created in 2010 with the aim of developing both technically AND economically viable floating foundation solutions for the offshore wind industry. Recipient of numerous innovation and entrepreneurship awards, the company benefits from the support of a large and prestigious panel of public and private investors.

Its industry-changing and patented “Damping pool” design is compatible with all existing standard offshore wind turbines. Maximizing local content and optimizing the entire process from construction to installation, maintenance and decommissioning have been the company’s key priorities since day one.

Its particularly cost-competitive solution allows for the development of projects without any water depth or soil constraints on sites benefiting from the best available wind resources. On top of a minimal visual impact from the shore, Ideol’s solution generates an increase of power production per turbine leading to a significant drop in the overall cost of energy.

*Benefiting from the experience and know-how of a fully integrated team of nearly 60 experts and engineers coming from the offshore oil & gas and renewables industries, the company is currently working on several demonstrator and pre-commercial projects across the globe. **In 2016, demonstrators equipped with Ideol technology will be built on two continents - Europe and Asia (Japan), positioning Ideol as a world leader in this booming market.***



Centrale Nantes is a French engineering school and member of the Ecoles Centrales Group. Its graduate, master and PhD programmes are based on the latest scientific and technological developments and the best management practices. Founded in 1919, Centrale Nantes’ 40-acre campus welcomes 2050 students, including 1340 graduate students, 200 sandwich-course students, 240 PhD students and 270 Master students.

With a comprehensive range of platforms for numerical simulation, wave-tank modelling and on-site test facilities (SEM-REV test site), Centrale Nantes is heavily involved in training, research and innovation in the maritime sector (shipbuilding, offshore, marine renewable energies). It is also uniquely positioned amongst engineering schools with a mind-set clearly focused on exploration, entrepreneurship and technology; from fundamental to applied research, from theory to producing solutions to address economic and industrial issues.



Affiliate of Bouygues Construction, Bouygues Travaux Publics has a worldwide reputation in civil works spanning across all types of infrastructure projects: underground works, river and maritime works, linear projects (rail, road, highways), industrial civil works (nuclear, energy and environment), earthworks and open-sky mining. In France and abroad, it combines a recognized know-how in the design and delivery of complex projects that can require project development and financing, large project management and state-of-the-art techniques. With the combination of purpose built means and recognized know-how in the maritime field; Bouygues Travaux Publics has required skills to meet sustainability and technical challenges with respect to our customer needs (Calais harbor extension, Nantes Saint-Nazaire Harbor, Tanger Med 2 harbor in Morocco, Pusan Harbor in Korea..). Since many years, Bouygues Travaux Publics is involved in the Marine Renewables Energy with strong innovation in construction methodology and material developments.

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