

## Naval Energies Drives its Leadership in Marine Renewable Energies with Dassault Systèmes

- Naval Energies deploys the 3DEXPERIENCE platform to develop new offshore floating wind turbines for wind farm projects and OTEC solutions to value deep water resources
- Digital applications on the cloud will help Naval Energies reduce development time and costs
- Dassault Systèmes enables marine and offshore companies to successfully navigate market transformations and deliver sustainable innovations

VELIZY-VILLACOUBLAY, France — February 7, 2019 — [Dassault Systèmes](#) (Euronext Paris: #13065, DSY.PA) announced that [Naval Energies](#), a leader in marine renewables, is using the 3DEXPERIENCE platform to develop new offshore floating wind turbines and Ocean Thermal Energy Conversion (OTEC) turnkey solutions, and drive its leadership in marine renewable energies.

“The sea represents a source of renewable energy that can help to satisfy the needs of the world’s growing population while ensuring a carbon-free footprint,” said Laurent Schneider Maunoury, CEO, Naval Energies. “As we work toward harnessing these possibilities, Dassault Systèmes’ 3DEXPERIENCE platform was a strategic choice for accelerating the development of our technological solutions. Thanks to the cloud, we’ve quickly started to deploy the platform, and can scale its use from the design process to manufacturing and operations when needed.”

Naval Energies will rely on the “[Designed for Sea](#)” industry solution experience, based on the 3DEXPERIENCE platform, for program management, engineering and analysis of semi-submersible floaters and OTEC solutions, anchoring systems, underwater cables and connection solutions for offshore wind farm projects. Naval Energies can securely collaborate with its network of partners, reuse and share existing know-how, and reduce program development cycles and costs.

Programs include the [Groix and Belle-Ile floating wind farm](#), a pilot project to install four 6-megawatt wind turbines off France’s Atlantic coast that will produce electricity for 20,000 households. The project aims to optimize floating wind farm technology and infrastructure before full-scale deployments and, ultimately, contribute to energy transition in France. Naval Energies is the prime contractor for semi-submersible floating systems.

Floating wind turbines offer opportunities to harness the energy of offshore winds in deep maritime areas that are not visible from a coastline, through the use of a floating structure fixed to the seabed by an anchoring system that controls its movements. OTEC is a process that can produce electricity by using the temperature difference between deep cold ocean water and

warm tropical surface waters. OTEC plants pump large quantities of deep cold seawater and surface seawater to run a power cycle and produce electricity.

Naval Energies' technological solutions for offshore floating wind turbines and OTEC will play a role in the definition of marine renewable energy industry standards that could allow for a more affordable energy alternative in the future.

"The marine marketplace is shifting due to a heightened focus on alternative energy sources. Innovators like Naval Energies are entering new segments with new business models," said Alain Houard, Vice President, Marine & Offshore Industry, Dassault Systèmes. "The 3DEXPERIENCE platform enables them to better address the challenges of this market transformation as well as leverage opportunities originating from the sea with new ways of working."

France, which has [the world's second largest maritime surface measuring 11,000 km<sup>2</sup>](#), seeks to fulfill [32 percent of the country's energy consumption](#) with renewable energies by 2030.

#### **Social media:**

Share this on Twitter: [.@navalenergies](#) uses #3DEXPERIENCE for #offshore floating #wind turbine solutions #marinerenewableenergy @Dassault3DS #MRE #cloud

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#### **For more information:**

Dassault Systèmes' industry solution experiences for the Marine & Offshore industry: <https://ifwe.3ds.com/marine-offshore>

Dassault Systèmes' 3DEXPERIENCE platform, 3D design software, 3D Digital Mock Up and Product Lifecycle Management (PLM) solutions: <http://www.3ds.com>

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#### **About Dassault Systèmes**

Dassault Systèmes, the 3DEXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).

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#### **About Naval Energies**

Naval Energies is a leader in the field of marine renewable energies. Naval Energies develops systems and subsystems for the production of renewable and carbon-free electricity from two different marine energy sources - offshore winds and the thermal potential of tropical seas. From the design stage to construction and installation, and all the way through to maintenance, we are present throughout the product life cycle and control the entire value chain, both at sea and in coastal areas. All over the world, we are helping to develop alternative, renewable and environmentally friendly energy from the most powerful source available: the sea.

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