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**PRESS RELEASE**

## Energy Observer vessel fitted with OceanWings® wingsails, the solution devised by VPLP and CNIM to decarbonize maritime transport

**One year after signature of the technological partnership between VPLP Design and CNIM, Oceanwings®, a new wind propulsion method, is coming to industrial maturity.**

**Energy Observer, the first hydrogen-powered vessel aiming to achieve energy self-sufficiency, with zero greenhouse gas and fine particle emissions, has been equipped with Oceanwings® wingsails. This hybrid propulsion system consisting of a composite mast 12m high and two sails of 32m<sup>2</sup>, will reduce the craft's energy spending. Designed by VPLP Design, Oceanwings® wingsails are jointly developed and manufactured in CNIM's industrial facilities in La Seyne-sur-Mer.**

Installation of **Oceanwings® on board Energy Observer** is a first step towards reducing the environmental impact of global shipping. Inspired by the rigid sails of the America's Cup, this technology allows **energy savings of between 18 and 42% depending on the vessel**. A significant figure when it is recalled that 90% of all world trade transits by sea. Some 50,000 ships are therefore responsible for severe air pollution by rejecting into the atmosphere pollutants such as fine particles, and oxides of nitrogen (NOx) and sulphur (SOx).

With its **fully automated system**, Oceanwings® offers the possibility of using wind as the propulsive force, without any need for a sailor-trained crew. The wing is equipped with sensors connected to an embedded intelligence that analyses the environmental conditions and allows it to adapt to them. *"Depending on the direction you want to take, the navigation system sends adjustment instructions directly to the sail. You don't have to do anything. Everything is automatic"* says Nicolas Sdez, engineer and designer of the Oceanwings® prototype at VPLP Design.

### **From the idea to the joint development and industrial manufacturing**

At the end of 2017, CNIM and VPLP Design signed a technological partnership agreement for design and manufacture of the Oceanwings® propulsion system. The partnership took up the challenge of **designing a product suitable for industrial production**. The Oceanwings® wingsails have now reached maturity, with the first two being integrated in the Energy Observer vessel.

CNIM has brought its expertise as an equipment manufacturer and industrial contractor to ensure that the Oceanwings® design meets the technical and industrial challenges of mass production. *"Oceanwings® is the association of 2 expertises: the expertise of CNIM, an industrial company for more than 160 years, greatly involved in the design and manufacture of products for shipping, and that of VPLP design, a firm of naval architects and an essential player in the biggest competitions in the world of sailing,"* says Philippe Lazare, chief executive of CNIM's Industrial Systems Division. *"We offer an industrial product with high added value that meets not only the performance levels expected by our customers but also the economic constraints imposed by the market."*



Cargo equipped with Oceanwings®



Energy Observer equipped with Oceanwings®

## A hybrid propulsion system for a wide variety of new markets

"Oceanwings® wingsails will undoubtedly find their place in fields as diverse as **recreational sailing, yachting, maritime transport** (bulk carriers, chemical tankers, oil tankers, etc.) and offshore **fishing**," says Marc Van Peteghem, joint founder of VPLP Design.

More information on [Joint design of Oceanwings® and vessel propulsion](#) with [VPLP Design](#).

## Energy Observer, an experimental platform for the energies of the future

This former legendary racing boat has been repackaged into an electrically-powered ship of the future, operating thanks to a renewable energy mix and a low-carbon hydrogen production system using seawater. Now equipped with a revolutionary energy architecture, Energy Observer is the first vessel in the world to produce its hydrogen from seawater thanks to renewable energies. More than a boat, Energy Observer is a reduced model of the energy networks of the future: digitized, decarbonized and decentralized. A genuine experimental laboratory aiming at achieving energy autonomy, each brick of this model has been tested and optimized in extreme environments in order to ultimately enable its application in a terrestrial environment.

### About CNIM

Founded in 1856, CNIM is a French equipment manufacturer and industrial contractor operating on a worldwide basis. The Group supplies products and services to major public and private sector organizations, local authorities and national governments in the Environment, Energy, Defense, and high technology markets. Technological innovation is at the core of the equipment and services designed and manufactured by the Group. They contribute to the production of cleaner and more competitive energy, to limiting the environmental impacts of industrial activities, to making sensitive facilities and infrastructures safer and protecting individuals and nation states. CNIM is listed on the Euronext exchange in Paris. It relies on a stable family-based majority shareholding structure committed to its development. CNIM employs 2,570 people with a turnover of € 634.9 million in 2017, of which 51.6% is exported.

<https://cnim.com/> - Twitter: @CNIM\_Group

### About VPLP Design

VPLP is an internationally renowned team of naval architects, based in Vannes and Paris, France, that designs race, cruise and work craft. Well-known for its racing boats and large cruise catamarans, VPLP also has had a firm foothold in the field of production craft since 1986 with the Lagoon catamaran range. As well as offering expertise in naval architecture, VPLP is at the cutting edge of design and innovation. Backed by its experience in the America's Cup, and the IMOCA's and Ultime's events, it uses and develops latest-generation numerical simulation tools in the field of hydro and aerodynamics (CFD, code AVL, VPP and routing, etc.).

<https://vplp.fr/> - Twitter: VPLPYachtDesign - Facebook: VPLPdesign

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