AYRO was recently awarded an Approval in Principle (AiP) for its Oceanwings® 3.6.3. wind assisted propulsion system for ships from DNV GL, a world’s leading classification society. The Oceanwings 3.6.3 system is designed to enable ship owners and operators to leverage wind energy to improve the energy balance of individual vessels and fleets, thereby significantly reducing carbon emissions.

Following 10 years of research, a first prototype in 2017, and the industrial demonstrator Energy Observer in 2019, AYRO continues the development and industrial process of their system with the AiP from DNV GL. After a review of the main plans and documents of the Oceanwings 3.6.3 system against the relevant DNV GL rules for the classification of ships, DNV GL was able to issue an AiP statement confirming that no significant obstacles exist to prevent the concept from being realized.

As incoming maritime regulations are ramping up, the pressure to improve sustainability and reduce emissions is increasing. The Oceanwings system enables the maritime stakeholders to significantly reduce their greenhouse gases emissions and improve their EEDI or EEXI efficiency index, as part of efforts to comply with the IMO 2030 Greenhouse Gas (GHG) strategy.

The wind propulsion system is a 363 square meter 2-elements wingsail several of which can be installed on board cargo vessels. AYRO is now manufacturing four Oceanwings to be fitted on “Canopée”, a RORO vessel under construction. This hybridization system for the propulsion of ships is applicable for both newbuildings and in the retrofit of existing ships.

“This AiP award is a significant step in the development of AYRO and we are happy to have passed the first step of the on-going certification process of our wingsail. This is the result of the work of the entire technical team over the past few months. The Oceanwings® 3.6.3 are suitable for most types of cargo vessels. We continue to receive a lot of enquiries and numerous requests for feasibility studies from shipowners and charterers worldwide, for both retrofits and newbuilding projects. Our mission and vision is to support them in designing their vessels as well as fitting and maintaining the Oceanwings® in order to help them meet the challenges of competitiveness and GHG emission reductions.” says Ludovic Gérard, CEO.
Press Release

“We are very pleased to be able to issue this AiP to AYRO for its Oceanwings 3.6.3 system,” said Hasso Hoffmeister, Senior Principal Engineer at DNV GL - Maritime. "National and international regulations, in addition to governmental, customer and public are all increasing pressure on the industry to decarbonize. An AiP can help build confidence in shipowners and operators by demonstrating that new technologies can not only help them improve sustainability, but follow well established, trusted and independent standards.”

About AiP (Approval in Principle)
An Approval in Principle is an independent assessment of a concept within an agreed framework, confirming that the design is feasible and no significant obstacles exist to prevent the concept from being realized. The AIP is typically carried out at an early stage of a project to confirm its feasibility towards the project team itself, company management, external investors or future regulators.

About AYRO
AYRO is a French company that designs, manufactures and sells the wings Oceanwings® to be installed on cargo vessels and yachts, contributing to the reduction of CO2 emissions by reducing fossil energy consumption.
For more information, please visit our website: www.ayro.fr

About DNV GL – Maritime
DNV GL is the world’s leading classification society and a recognized advisor for the maritime industry. DNV GL enhance safety, quality, energy efficiency and environmental performance of the global shipping industry – across all vessel types and offshore structures. DNV GL invest heavily in research and development to find solutions, together with the industry, that address strategic, operational or regulatory challenges. For more information visit: www.dnvgl.com/maritime

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