September 4, 2025
Kawasaki Kisen Kaisha, Ltd.

Phase One of the Development of "Seawing" Automated Kite System Harnessing Natural Wind Power Completed

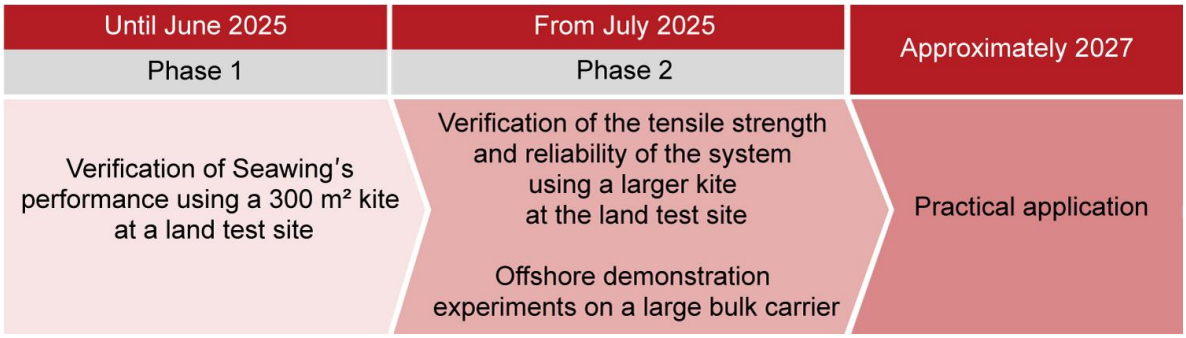
Kawasaki Kisen Kaisha, Ltd. ("K" LINE) is pleased to announce that phase one of the development of "Seawing" automated kite system utilizing wind power being developed by OCEANICWING S.A.S (OCEANICWING), a subsidiary of "K" LINE in France, was successfully completed in June 2025. In phase one of the development of "Seawing", OCEANICWING verified the tensile strength and performance of "Seawing" system using a 300 m^2 kite at a land test site. OCEANICWING has confirmed the results of these tests have been good.

To move forward with the development and practical application of "Seawing", OCEANICWING commenced phase two of its development in July 2025. In phase two of the development of "Seawing", OCEANICWING plans to increase the size of the kite and verify the tensile strength, reliability, operability and safety of "Seawing" system at the land test site, looking ahead to the shipboard use of the system. Additionally, OCEANICWING will conduct offshore demonstration experiments on a large bulk carrier owned and operated by "K" LINE. The goal is to complete the tests within approximately two years and move toward the practical application of "Seawing". It is expected that "Seawing" will reduce fuel consumption by more than 10%.*1

Additionally, to facilitate the establishment and commercialization of "Seawing", OCEANICWING appointed Shingo Kameyama CEO on August 1. Mr. Kameyama has been involved in the development of "Seawing".

*1 Please note that actual energy-saving effects depend on ship type, speed, route and season. In certain combinations of these factors, fuel consumption may be reduced by significantly more than 10%.

Schedule



"Seawing" harnesses natural wind power and can be installed on any type of vessel, including existing vessels. It is expected that there will be synergy between "Seawing" and the efforts to

transition away from the conventionally used heavy fuel oil to other fuels such as liquified natural gas (LNG), and that “Seawing” will increase performance in terms of the reduction of CO_2 emissions. There are several wind-assisted propulsion systems (WAPS) that are under development, and “Seawing” is differentiated from the other WAPS by its ability to generate a comparatively large amount of thrust, which is achieved using high-altitude wind.

Takenori Igarashi, the President & CEO of “K” LINE, said, “Phase one of “Seawing” development process being implemented by OCEANICWING has been successfully completed. We will continue to develop the system so that it can be used on ships. We plan to develop this innovative energy saving device harnessing natural wind power into a great solution for achieving the decarbonization of the shipping industry.”

The “K” LINE Group will continue to strive to contribute to the sustainable development of society and the economy and continue to increase its corporate value based on “K” LINE Environmental Vision 2050, the Group’s long-term environment management vision as it moves toward 2050. “K” LINE will maximize the use of wind, a renewable source of energy, in the propulsion of the vessels to contribute to the low-carbon initiatives of not only “K” LINE, but also “K” LINE’s customers and society as a whole.

Verification of Seawing’s perfomance at the land test site