January 21st, 2022
Kawasaki Kisen Kaisha, Ltd.
Kawasaki Kinkai Kisen Kaisha, Ltd.
“K” Line Wind Service, Ltd.

Joint project on “Mass-production and Cost Reduction of Floating Offshore Wind Installation” adopted as Green Innovation Fund

“K” Line Wind Service, Ltd., a joint venture company between Kawasaki Kisen Kaisha, Ltd. (“K” LINE) and Kawasaki Kinkai Kisen Kaisha, Ltd.(*1), together with Japan Marine United Corporation, Nihon Shipyard Co., Ltd. and Toa Corporation is pleased to announce that the project of “Mass-Production and Cost Reduction of Floating Offshore Wind Installation” was officially adopted as Green Innovation Fund for “Cost Reduction for Offshore Wind Power Generation Projects”

In order to achieve the Japanese government target of carbon neutral by 2050, development of renewable energy is essential. The offshore wind power generation will play an important role in this target with its potential as major energy source and economic growth brought by the supply-chain development in Japan. With limited shallow water for Offshore Wind installation around Japan, there is a high expectation of floating offshore wind which can be developed despite of the depth of ocean. To develop the floating offshore wind, the technology for mass-production and cost reduction needs to be achieved
Having above understanding, the consortium targets to develop mass-production method and cost reduction of floating foundation, mooring/anchoring system, installation at sea in every aspect of EPCI (Engineering, Procurement, Construction and Installation).

川崎汽船株式會社
サステナビリティ推進・ＩＲ・広報グループ
KAWASAKI KISEN KAISHA, LTD.
Corporate Sustainability, IR & Communication Group

The role of each consortium member shall be as per the chart.

Company	Major Role
Japan Marine United Corporation	Development/Manufacturing of floating foundation and EPCI of floating offshore wind projects ・ Optimization of Floating Foundation ・ Mass-production of Floating Foundation ・ Optimization of Hybrid Mooring system ・ Development of cost competitive procedure in floating offshore wind installation (Turbine assembly and floating foundation installation)
Nihon Shipyard Co., Ltd.	Engineering of floating foundation and development of offshore support vessels for offshore wind projects ・ Optimization of Floating Foundation ・ Engineering for mass-production of Floating Foundation ・ Engineering for Hybrid Mooring System ・ Engineering for cost competitive procedure in floating offshore wind installation (Turbine assembly and floating foundation installation)
"K" Line Wind Service, Ltd.	Development of floating foundation installation ・ Cost competitive installation procedure
Toa Corporation	Development of turbine assembly ・ Cost competitive assembly procedure

"K" Line Wind Service, Ltd. is determined to contribute to floating offshore wind development by developing optimal and cost competitive procedure in installation of floating foundation (*2) with the experience and know-how "K" Line group gained through the Offshore Support Vessel operations.

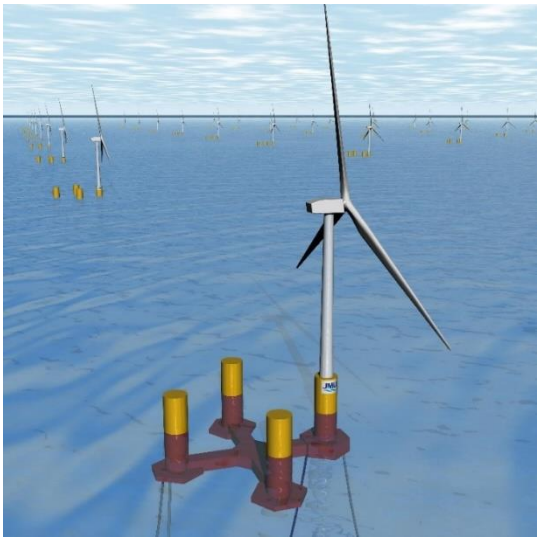
(*1) "K" Line Wind Service, Ltd

A joint venture company established by Kawasaki Kisen Kaisha, Ltd. and Kawasaki Kinkai Kisen Kaisha, Ltd. on June 1st, 2021 targeting the contribution to Offshore Wind in Japan throughout the marine solution that the group have developed in the history of 100-year.

Announcement on April 30th, 2021:
Establishment of "K" Line Wind Service, Ltd. for Offshore Support Vessel Operation
(https://www.kline.co.jp/en/news/energy/energy1216843343315336832/main/0/link/210430EN2.pdf)

(*2) There are two types of Offshore wind turbines; one is bottom-fixed wind turbine can be installed in shallow water and the other is floating wind turbines which can be installed in deep water and anchored to the seabed. The experience of "K" Line group in Anchor Handling Tug Vessels in oil and gas industry can be expanded to floating offshore wind and we believe we can deliver the optimization and cost competitiveness in floating offshore wind installation.

Anchor Handling Tug Supply Vessel operated by “K” Line Group



Floating Offshore Wind Turbine
(Provided by Japan Marine United Corporation)