Marubeni Corporation The University of Tokyo Mitsubishi Corporation Mitsubishi Heavy Industries, Ltd. Japan Marine United Corporation Mitsui Engineering & Shipbuilding Co., Ltd. Nippon Steel & Sumitomo Metal Corporation Hitachi, Ltd. Furukawa Electric Co., Ltd. Shimizu Corporation Mizuho Information & Research Institute, Inc.

## Fukushima Recovery, Experimental Offshore Floating Wind Farm Project

A consortium comprising of Marubeni (project integrator), the University of Tokyo (technical advisor), Mitsubishi, Mitsubishi Heavy Industries, Japan Marine United, Mitsui Engineering & Shipbuilding, Nippon Steel & Sumitomo Metal Corporation, Hitachi, Furukawa Electric, Shimizu, and Mizuho Information & Research have been participating in an experimental offshore floating wind farm project sponsored by the Ministry of Economy, Trade and Industry since March 2012.

At present, the installation work of 2MW downwind-type floating wind turbine, 66kV floating power sub-station, extra-high voltage undersea cable and the dynamic cable at the testing area (1<sup>st</sup> phase) have been successfully completed and commenced operations today.

The experimental study of 2MW downwind-type floating wind turbine, 66kV floating power sub-station commenced today. The evaluation of safety, reliability and economic potential of the offshore floating wind farm through the collection and analysis of meteorological data, hydrographic data and performance data will be carried out during the experimental study. In addition, we are targeting to establish the method of operation and maintenance of the offshore floating wind farm at the same time.

At the 2<sup>nd</sup> phase, the 2 unit of 7MW oil pressure drive-type floating wind turbine will be installed within fiscal year 2014 and the total capacity of the offshore floating wind farm will be 16MW, making it the world's biggest floating offshore wind farm.

During this experimental study that will be carried out until the fiscal year 2015, we will do our best to achieve the following aims;

- The creation of offshore wind-related industry
- Development of offshore wind facilities as Japan's new export industry
- Coexistence with the fisheries



2MW Downwind-type Floating Wind Turbine "Fukushima Mirai" (Floater: 4 Column Semi-Sub)



66kV Floating Substation "Fukushima Kizuna" (Floater: Advanced Spar)

Facility name	Scale	Form	Floating Form	Phase
Floating Substation	25MVA 66kV	Substation	Advanced Spar	First
"Fukushima Kizuna"				
Floating Wind Turbine	2MW	Downwind Type	4 Column Semi-Sub	First
"Fukushima Mirai"				
Large Floating Wind Turbine	7MW	Oil Pressure Drive Type	3 Column Semi-Sub	Second
"Fukushima Shimpuu"				
Large Floating Wind Turbine	7MW	Oil Pressure Drive Type	Advanced Spar	Second