



Electric Power Development Co., Ltd.

Participation in Floating Offshore Wind Demonstration Project in Spain

Gaining Knowledge on Floating Offshore Wind through a Hybrid Barge-Type × Spar-Type WHEEL

Electric Power Development Co., Ltd. (headquartered in Chuo-ku, Tokyo; President and CEO: Hitoshi Kanno; "J-POWER") has joined the WHEEL project, a floating offshore wind power demonstration project led by ESTEYCO SA (headquartered in Madrid, Spain; "ESTEYCO") off the coast of Gran Canaria, Spain.

Floating offshore wind power is power generation where wind turbines are installed on floating structures rather than fixed to the seabed. This technology enables the installation of wind turbines in deep-water areas, thereby expanding the potential for wind power generation across broader marine areas. As such, its adoption is increasingly anticipated both domestically and internationally.

In this demonstration project, a floating offshore wind turbine (6,170 kW × 1 unit) will be constructed and tested using WHEEL, a floating foundation technology developed by ESTEYCO. WHEEL combines the advantages of barge-type foundations*1 and spar-type foundations*2.

- *1 Barge-type foundations are floating structures with a flat-bottom design that maintain stability by maximizing the surface area in contact with the water. They can be used in shallow waters.
- *2 Spar-type foundations are cylindrical structures that extend deep below the waterline to lower the center of gravity, maintaining stability and reducing sensitivity to wave motion

While various floating foundation designs are currently under development, the WHEEL foundation, being primarily made of concrete, offers potential benefits over steel-based designs. These include cost reductions, lower CO₂ emissions during manufacturing, and the potential for greater involvement of local businesses due to easier manufacturing.

Through this project, J-POWER aims to acquire knowledge in the manufacturing, assembly, installation, and operation of floating offshore wind power, contributing to the development of floating offshore wind power projects in Japan and abroad.

The J-POWER Group, under its "J-POWER BLUE MISSION 2050" announced in February 2021, is committed to expanding CO₂-free power sources, including wind power, as part of its goal to achieve carbon neutrality by 2050.

(1) Project Overview

Name	WHEEL (Wind Hybrid Esteyco Evolution for Low-carbon solutions)
Location	3 km off the eastern coast of Gran Canaria, Spain
Output	6,170kW (One unit manufactured by 2BEnergy)
Schedule	Foundation manufacturing to begin in June 2025
	Installation to begin during Q1 2026
	Operations to commence during Q2 2026

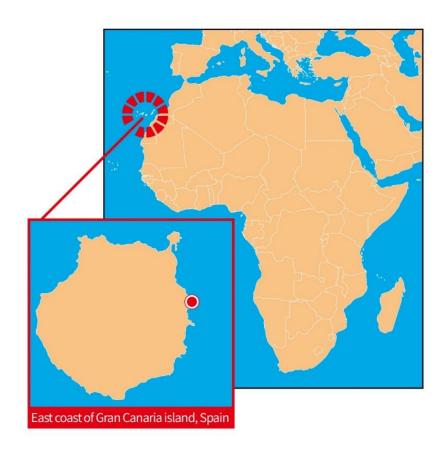
(2) About ESTEYCO

Name	ESTEYCO SA
Headquarters	Madrid, Spain
Business	Engineering, technology and Architectural consultancy firm

PUNER



[Demonstration Unit (Planned)] (Left: during transportation to the site, Right: during installation at the site)



[Project Location]