July 8, 2026

Electric Power Development Co., Ltd.

Tokyo Electric Power Company Holdings, Inc.

Chubu Electric Power Co., Inc.

Kawasaki Kisen Kaisha, Ltd.

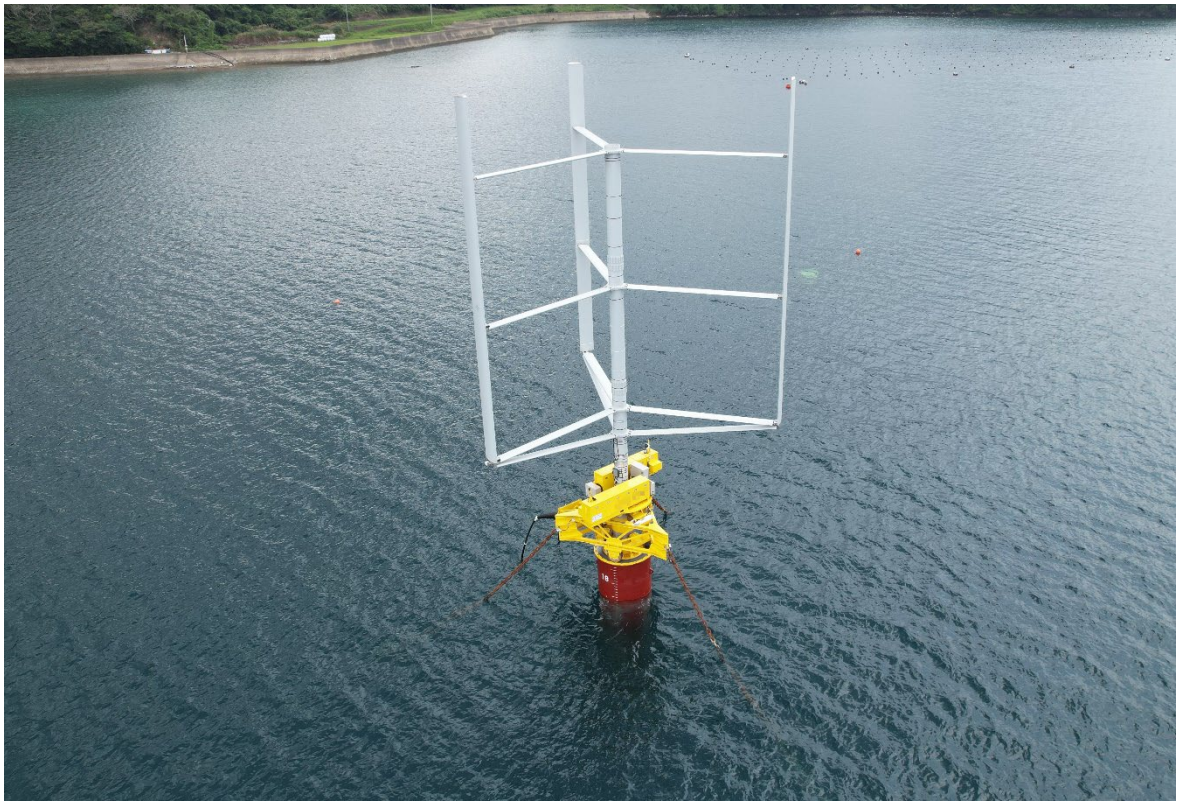
Sumitomo Heavy Industries, Ltd.

Albatross Technology Inc.

Experimental Floating Axis Wind Turbine (FAWT) installed in a bay of Iki City, Nagasaki

— Offshore demonstration of next-generation floating wind turbine begins, advancing the realization of low-cost domestic offshore wind power generation systems —

The FAWT Consortium of six companies listed above has installed an experimental low-cost next-generation floating wind turbine. The concept aims to make a fully domestic supply chain of offshore wind possible. The demonstration in a bay of Iki City, Nagasaki Prefecture, has started as of July 2026.



Installed experimental FAWT (rotor diameter: 9.3 m)

Onshore testing of the experimental FAWT

Overview of the offshore demonstration

■ Period: One year (planned)

■ Location: In a bay of Iki City, Nagasaki Prefecture

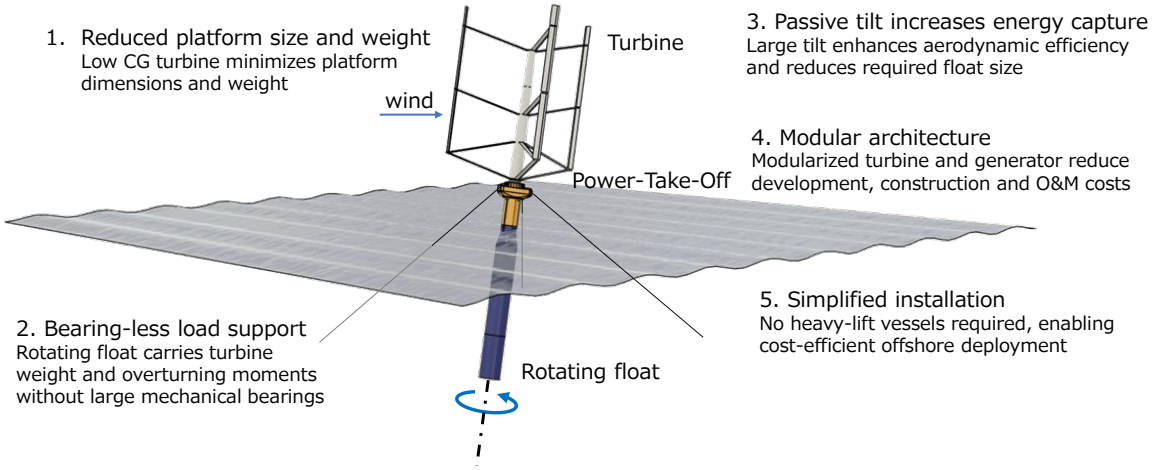
■ Description of the demonstration

The demonstrator consists of a vertical-axis wind turbine with three straight blades and a cylindrical floating foundation. The diameter of the rotor is 9.3 meters, and the diameter of the floating foundation is 1.7 meters. The maximum output power is under 20 kW. Station-keeping is achieved by three mooring lines, each connected to seabed anchors. The demonstration will verify the technical feasibility of FAWT, numerical analyses, and water tank test results. After the demonstration, the unit will be decommissioned, and detailed inspections of each component will be carried out. These activities are expected to help identify challenges for long-term operation and support the improvement of the design of future larger-scale systems.

Key features of FAWT

To promote the development of offshore wind as a key renewable energy source, it is necessary to expand floating offshore wind power systems in Japan, where shallow-water sites suitable for bottom-fixed turbines are limited. However, there are challenges in the adaptation of conventional horizontal-axis wind turbines to the floating system due to their large floating foundations and mooring systems required, which result in high costs.

To overcome these challenges, FAWT is based on a rational change of design philosophy derived from marine engineering principles. The goal of FAWT is to significantly reduce the cost of energy by simplifying the structure and lowering the center of gravity, while developing domestic supply chains for floating offshore wind.



Artist's concept of a megawatt-class FAWT

Outlook

Outcomes of the present demonstration, together with ongoing studies for larger-scale systems, will be used to advance the development of megawatt-class demonstration systems, with the ultimate goal of their commercial deployment in the future.

The FAWT Consortium will leverage the expertise possessed by each participating company in the joint development of the FAWT, which has the potential to be a game changer for the floating offshore wind industry. Through this, the consortium aims to establish offshore wind as a primary source of electricity and contribute to the realization of the carbon-neutral society.

Consortium members

1. Electric Power Development Co., Ltd. (headquartered in Chuo-ku, Tokyo; President: Hideaki Kato)
2. Tokyo Electric Power Company Holdings, Inc. (headquartered in Chiyoda-ku, Tokyo; President: Tomoaki Kobayakawa)

3. Chubu Electric Power Co., Inc. (headquartered in Nagoya City, Aichi; President: Kingo Hayashi)
4. Kawasaki Kisen Kaisha, Ltd. (headquartered in Chiyoda-ku, Tokyo; President: Takenori Igarashi)
5. Sumitomo Heavy Industries, Ltd. (headquartered in Shinagawa-ku, Tokyo; President: Toshiro Watanabe)
6. Albatross Technology Inc. (headquartered in Chuo-ku, Tokyo; CEO: Hiromichi Akimoto)

Reference: Press release dated May 30, 2023
Joint Research Agreement Signed for Next Generation (Floating Axis) Small-scale Offshore Wind Turbine Demonstration Project
https://www.jpower.co.jp/english/news_release/pdf/news230530e.pdf

Reference: Press release dated September 11, 2024
Consortium selected for NEDO's next-generation floating offshore wind power technology development project
https://www.jpower.co.jp/english/news_release/pdf/news240911e.pdf