

March 9th, 2026
J-POWER / Electric Power Development Co., Ltd.
IINO Kaiun Kaisha, Ltd.

Biofuel Trial Voyage Conducted on the Bulk Carrier “YODOHIME”

Electric Power Development Co., Ltd. (Head Office: Chuo-ku, Tokyo; Representative Director President: Hitoshi Kanno; hereinafter “J-POWER”) and IINO Kaiun Kaisha, Ltd. (Head Office: Chiyoda-ku, Tokyo; President and Representative Director: Yusuke Otani; hereinafter “IINO Lines”) are pleased to announce that biofuel trial voyage was conducted on the bulk carrier “YODOHIME” (delivered in February 2016), which is equipped with a Rotor Sail (Note 1).

This trial voyage using biofuel on a vessel equipped with wind-assisted propulsion technology marks the first such initiative by a domestic electric power company.

Note 1 : The Rotor Sail (24m in height and 4m in diameter) is a wind propulsion system which is installed on the vessel’s forecandle deck. It utilizes the latest AI technology to automatically control the rotation, direction, and speed of the rotor sail using real-time meteorological information, such as wind direction and wind speed, detected by sensors. The Magnus effect generated when wind meets the rotating cylindrical sail produces a powerful thrust which, in combination with the voyage optimization system, is expected to reduce fuel consumption and CO₂ emissions by approximately 6-10%.

Reference (Past Press Release - January 29, 2025)

[Completion of Norsepower Rotor Sail Installation on the bulk carrier “YODOHIME”](#)

The biofuel was supplied at Zhoushan Port, China, on January 18, 2026, and was used during the voyage from Australia to Japan. The sea trials were successfully completed on February 15. Following the sea trials, the vessel arrived in Japan in late February and has completed its voyage.

Biofuel is produced from biomass, which refers to organic resources derived from living organisms, such as waste cooking oil. Compared to conventional fossil fuels, biofuel is expected to reduce CO₂ emissions by approximately 80-90% over its entire lifecycle - from fuel production to consumption. Furthermore, biofuel is considered a ‘carbon-neutral’ fuel because the plants used as raw materials absorb CO₂ during their growth, offsetting the CO₂ emitted during combustion.

The fuel used on this voyage was a blended fuel (B24) consisting of 24% biofuel mixed with very low sulfur fuel oil (VLSFO). Biofuel can be used in existing marine diesel engines without any modification, contributing to CO₂ emissions reduction as a clean alternative fuel to fossil fuels.



“YODOHIME” bunkering biofuel

J-POWER will continue to take on the challenge of achieving carbon neutrality as set forth in J-POWER's ["BLUE MISSION 2050"](#).

In its mid-term management plan, ["The Adventure to Our Sustainable Future,"](#) IINO Lines has set a goal to achieve carbon neutrality by 2050. In line with this vision, IINO Lines will continue to actively promote initiatives for clean marine transport services.

[Information on each company]

J-POWER website: <https://www.jpowers.co.jp/english/>

J-POWER is an electric power company established in 1952 and headquartered in Japan. The Group has been engaged in hydroelectric, thermal, wind, geothermal, and solar power generation and transmission projects in Japan and abroad.

To achieve this mission, the Group announced the J-POWER ["BLUE MISSION 2050"](#), and is working to make our power generation business carbon neutral by 2050.

We have set targets to reduce CO₂ emissions by 9.2 million tons in FY2025*, 22.5 million tons in 2030*, and virtually zero in 2050 by accelerating the development of CO₂ free power sources, upcycling existing thermal power plants, and promoting initiatives to generate, produce, and supply CO₂ free hydrogen.

*All figures are compared to FY2013, J-POWER's domestic power generation business.

IINO Lines website: <https://www.iino.co.jp/kaiun/english/index.html>

IINO Lines, established in 1899, operates Oceangoing Shipping, Domestic and Short-sea Shipping and Real Estate Businesses. In Oceangoing Shipping Business, the company provides global transportation services, carrying energy resources and related products such as crude oil, LNG, LPG, petrochemicals and dry cargoes as both a shipowner and operator. As of December 31, 2025, IINO Lines owns and operates a total of 90 vessels, including 4 VLCCs, 32 chemical tankers, 23 dry bulk carriers, 8 large gas carriers, and 23 medium and small gas carriers.

Under its mid-term management plan, ["The Adventure to Our Sustainable Future,"](#) IINO Lines has set a goal to achieve carbon neutrality by 2050. In line with this vision, IINO Lines is actively investing in next generation fuels and other innovative technologies.

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