News Release





On the Conclusion of a Memorandum of Understanding Aimed at Building a CCUS Value Chain at Yokosuka Thermal Power Station

—A Joint Study on Installing CO₂ Capture Equipment for the Effective Utilization of CO₂ at a Coal-Fired Thermal Power Plant on Tokyo Bay for the First Time—

TOKYO—19 June 2025—JERA Co., Inc, ("JERA") and Kawasaki Heavy Industries, Ltd. ("KHI") hereby announce that they have today concluded a memorandum of understanding related to a joint study aimed at building a CCUS* value chain at Yokosuka Thermal Power Station (Kurihama, Yokosuka-city, Kanagawa-prefecture). Based on this memorandum, they plan to conduct demonstration testing using KHI's state-of-the-art carbon capture equipment at Yokosuka Thermal Power Station, which is operated by JERA subsidiary JERA Power Yokosuka G.K., by 2030. Moreover, this will be the first test of installing CO₂ capture facilities at a coal-fired thermal power plant on Tokyo Bay.

JERA, under its JERA zero CO₂ Emissions 2050 initiative, is expanding its use of renewable energy and working to develop zero-emissions thermal power as it aims to achieve net-zero CO₂ emissions by 2050. In domestic coal-fired thermal power, at Hekinan Thermal Power Station Unit 4 (Hekinan-city, Aichi-prefecture) it successfully conducted the world's first demonstration testing of 20% substitution of fuel ammonia at a large-scale commercial coal-fired thermal power plant (26 June 2024 JERA Press Release). Based on this successful demonstration, it has—while remaining mindful of the need to ensure a stable supply of electricity—accelerated its efforts to limit the use of inefficient coal-fired thermal power plants during periods of low demand and to decommission them entirely by FY 2030, to substitute fuel ammonia in part or whole at high-efficiency coal-fired thermal power plants, and to consider CCUS initiatives both domestically and overseas.

KHI, pursuing environmental management under its Kawasaki Global Environmental Vision 2050, has developed Kawasaki CO_2 Capture ("KCC") technology that uses a solid sorbent to absorb the CO_2 in exhaust gases and then capture it through the introduction of low-temperature (60°C) steam. By utilizing waste heat from power plants or industrial plants to generate steam, the KCC process reduces the cost of CO_2 capture. Initially developed as a technology for removing CO_2 from exhaled breath in enclosed spaces, KHI began conducting tests of its application to the removal of CO_2 from exhaust gases as a means of countering global warming, and has conducted multiple demonstration tests of CO_2 capture from exhaust gases at coal-fired thermal power plants.

As part of achieving a decarbonized society, plans for the demonstration testing call for installing pilot-scale KHI's CO₂ capture equipment at Yokosuka Thermal Power Station and demonstrating, by 2030, the process from capture of the CO₂ in thermal power plant exhaust gases through to its effective utilization.

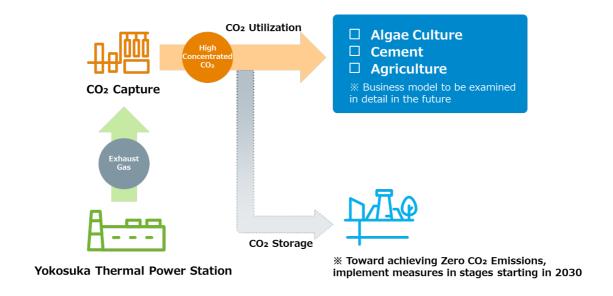
Going forward, the two companies will work through the memorandum to further the early practical implementation of CCUS, thereby contributing to achieving a decarbonized society and to resolving energy issues.

Attachment: CCUS image and CO₂ capture image

^{*} CCUS (Carbon Capture, Utilization, and Storage): Expectations are high for the early practical implementation of this technology. In addition to reducing CO₂ emissions into the atmosphere by capturing the CO₂ in exhaust gases generated when producing electricity, it will also contribute to achieving a decarbonized society by enabling this CO₂ to be stored underground or utilized as a raw material for agriculture or chemical production.

CCUS image and CO₂ capture image

CCUS (Carbon Capture, Utilization, and Storage)



CO₂ Capture

