

August 5, 2021

Kawasaki Kisen Kaisha, Ltd.

World's first CO2 Capture Plant on vessel installed on Coal carrier "CORONA UTILITY"
Launch of the "CC-OCEAN" Project demonstration

Kawasaki Kisen Kaisha, Ltd. ("K" LINE) has been conducting a joint project with Mitsubishi Shipbuilding Co., Ltd. ("Mitsubishi Shipbuilding") and Nippon Kaiji Kyokai ("Class NK") to develop CO2 capture plant onboard vessel as part of the "Research and Development for advancing marine resources technologies" (Note 1). The installation of the small CO2 capture plant has been installed on the coal carrier "CORONA UTILITY", operated by "K" LINE for Tohoku Electric Power Co., Inc.) at Mitsubishi Heavy Industries, Ltd., Yokohama Works ("MHI Yokohama").

For the installation of this plant, Class NK has conducted a Hazard Identification Study (HAZID) and verified the viewpoint of safety.



CC-OCEAN
CARBON CAPTURE ON THE OCEAN

* The design of the logo is from initials of Carbon Capture on the Ocean and represents capturing molecular of carbon dioxide inside.

After departure of the vessel from MHI Yokohama, experts from Mitsubishi Shipbuilding will be on board the vessel for one voyage to commission the small CO2 capture plant, evaluate its operation performance at sea, and analyze the captured CO2. After that, until the end of FY 2021, the ship's crew will evaluate the operation, safety and operability of the CO2 capture plant, and will conduct demonstration tests in order to commercialize the plant such as downsizing in size and weight, efficiency of CO2 capture system with Mitsubishi Shipbuilding.

Based on the "K" LINE Environmental Vision 2050 (Note 2), we will continue to research, develop, and introduce various environmental load reduction technologies, including the "CC-OCEAN" project, and contribute to activities aimed at achieving GHG reduction targets and realizing a carbon-neutral society.

(Note 1) Announced on 31-Aug 2020 : "CC-Ocean" (Carbon Capture on the Ocean) project

<https://www.kline.co.jp/en/news/csr/csr-5587043701830807195/main/0/link/200831EN%20.pdf>

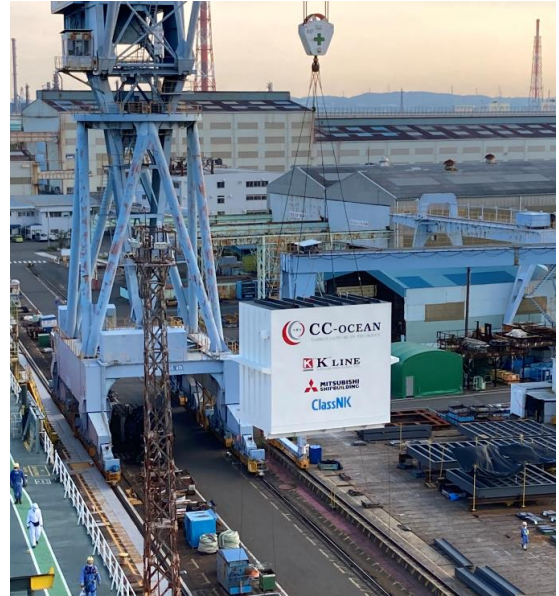
(Note 2) "K" LINE Environmental Vision 2050, Blue Seas for the Future, which is formulated in 2015.

Based on the revision in June 2020, our milestone target is set to [improve CO2 emission efficiency by 50% over 2008], which is surpassing the IMO target of a 40% improvement.

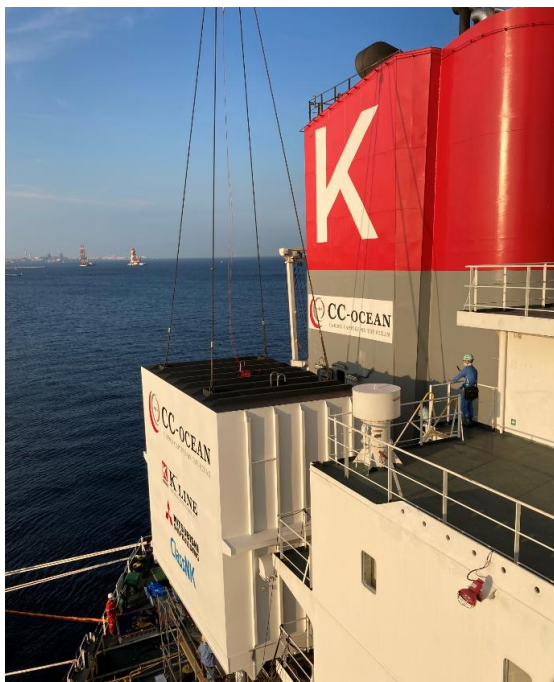
<https://www.kline.co.jp/en/csr/environment/management.html#002>



1. Before installation



2. Transferring in the MHI Yokohama



3. Installing on vessel ①



4. Installing on vessel ②