

November 14, 2023  
Kansai Electric Power Co., Inc.  
Mitsui O.S.K. Lines, Ltd.

## **KEPCO and MOL Sign Service Agreement on Development of Liquefied CO<sub>2</sub> Carrier Design for CCS Value Chain**

The Kansai Electric Power Co., Inc. (KEPCO; President: Nozomi Mori; Headquarters: Osaka-shi, Osaka Prefecture) and Mitsui O.S.K. Lines, Ltd. (MOL; President & CEO: Takeshi Hashimoto; Headquarters: Minato-ku, Tokyo) today announced the signing of a service agreement to conduct feasibility research on the design of a liquefied CO<sub>2</sub> carrier at shipyards in Japan and overseas.

The detailed research and study of the carbon dioxide capture and storage (CCS) value chain, including shipyards, is a pioneering effort for other business operators that emit CO<sub>2</sub>.

The agreement follows the completion of an initial joint study on liquefied CO<sub>2</sub> transport, based on a memorandum of understanding (MOU) between the two companies, by which MOL and KEPCO have been jointly studying the optimal system for ocean transport and storage of liquefied CO<sub>2</sub>, targeting CO<sub>2</sub> emitted from KEPCO's thermal power plants to establish a CCS value chain.<sup>1</sup>

Under the service agreement, the companies will conduct the studies of an optimal ship size for the CCS value chain to be constructed by KEPCO, with the aim of realizing ocean transport of liquefied CO<sub>2</sub>.

The companies will accelerate actions toward the realization of a zero-carbon society through full-scale surveys and studies aimed at the realization of liquefied CO<sub>2</sub> vessels, which will play a key role in the development of the CCS value chain.

1: Please refer to the following News.

December 23, 2022: [KEPCO and MOL to Study CO<sub>2</sub> Ocean Transport for Development of CCS Value Chain](#)

Attachment: Outline of the Service Agreement

## Outline of the Service Agreement

### Objective

- Identify issues such as optimal ship size, transport costs, and necessary technologies for ocean transport, which is the process after the separation, capture, and storage of CO<sub>2</sub> emitted from specific points, including KEPCO's thermal power plants, with the aim of realizing ocean transport of liquefied CO<sub>2</sub>. as quickly as possible.
- Conduct feasibility research related to the design, etc. of the liquefied CO<sub>2</sub> vessel at shipyards.

### Images of studies and surveys on CO<sub>2</sub> capture and storage

