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Cosmo Energy Holdings Co., Ltd.
The Kansai Electric Power Co., Inc.

## Cosmo Energy Holdings and KEPCO Initiate Joint Studies Toward the Establisment of a CCS Value Chain in the Sakai-Semboku Area

Cosmo Energy Holdings Co., Ltd. and The Kansai Electric Power Co., Inc. have initiated joint studies toward the establishment of a CCS<sup>1</sup> value chain in the Sakai-Semboku area based on a memorandum of understanding between the two companies.

These studies will evaluate the rational design and economic viability of a CCS value chain that encompasses the separation and capture of carbon dioxide (CO<sub>2</sub>) emitted from business sites operated by the two companies in the Sakai-Semboku area through to the joint liquefaction and storage, and subsequent shipment of captured CO<sub>2</sub> to storage sites. In addition, these studies will investigate the feasibility and economic viability of liquefied CO<sub>2</sub> transportation modes and potential storage sites.

The joint study of liquefaction, storage, and shipping facilities by the two companies will enable the design of a larger and more efficient facility.

The two companies will conduct studies toward the establishment of an area-wide CCS value chain, with a view to future cooperation with other business operators that have CO<sub>2</sub> emission sources<sup>2</sup> in the Sakai-Semboku area, thereby contributing to the realization of a zero-carbon society.

1 CCS (Carbon capture and storage) is a technology that captures CO<sub>2</sub> from exhaust gas and stores it underground.

2 Factories, power plants, and other business sites that emit CO<sub>2</sub>

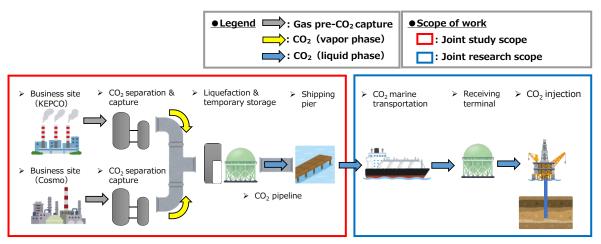
## **Project Overview**

## ■Purpose

• This project aims to build a rational CCS value chain by jointly liquefying, storing, and shipping CO<sub>2</sub> separated and captured from business sites operated by the two companies in the Sakai-Semboku area.

## ■Study outline

- $\cdot$  Studies related to the capture of CO<sub>2</sub> emitted from business sites operated by the two companies in the Sakai-Semboku area
- · Studies related to the liquefaction and temporary storage of CO<sub>2</sub> captured from each business site
- · Studies related to CO<sub>2</sub> pipeline transportation outside of each business site
- · Studies related to the loading of liquified CO<sub>2</sub> from shipping piers
- · Research on potential storage sites and modes of transportation from the Sakai-Semboku area to potential storage sites
- < Conceptual diagram of research on CO<sub>2</sub> capture, storage, and shipment>



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