Osaka Gas and Shell to collaborate in CCS value chain development May 9, 2023 Osaka Gas Co., Ltd.

Osaka Gas Co., Ltd. (Osaka Gas) and Shell Singapore Pte. Ltd (Shell) have entered into an agreement to conduct a joint study on a project to develop a CCS (Carbon dioxide Capture and Storage) value chain where carbon dioxide (CO₂) is captured from emissions of industrial facilities in Japan and injected into underground storage worldwide.

Osaka Gas and Shell plan to conduct a value chain-wide feasibility study commencing in May 2023. The scope includes the aggregation and liquefaction of CO₂ captured from emissions of steel, cement, chemical, and other plants in the hard-to-abate sectors in Japan; the transportation of liquefied CO₂ via ship to storage facilities located in the Asia Pacific region; and the injection and storage of CO₂ underground.

The project builds on a joint study Osaka Gas and Shell started in June 2022,¹ covering broader categories in the lower carbon space, including CCUS (Carbon dioxide Capture, Utilization, and Storage).

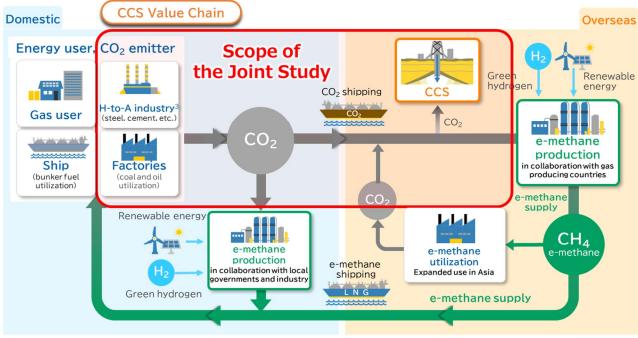
This project is aligned with Osaka Gas's initiative to contribute to reducing carbon emissions in the Japanese industry and achieving a carbon neutral society. The company is developing technologies and services to promote net zero emissions under the Carbon Neutral Vision announced in January 2021 and the Energy Transition 2030 released in March 2023.

1 Announced in an article dated June 6, 2022, "Osaka Gas to collaborate with Shell in developing decarbonization solutions, including methanation, hydrogen, and CCUS," in which "Shell" was under its former name Shell Eastern Petroleum (Pte) Ltd. (https://www.osakagas.co.jp/company/press/pr2022/1307665_49634.html)

1. Project Overview

Study on CCS value chain development

- the aggregation and liquefaction of CO₂ captured from emissions of steel, cement, chemical and other plants in the hard-to-abate sectors in Japan
- the transportation of liquefied CO₂ via ship to storage facilities located in the Asia Pacific region
- the injection and storage of CO₂ underground



- 1 Carbon dioxide Capture and Utilization
- 3 Hard-to-abate industry

2 Carbon dioxide Capture and Storage

2. Project Partner

Name	Shell Singapore Pte. Ltd (formerly named Shell Eastern Petroleum (Pte) Ltd)
Location	Singapore
Established	August 1960